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INDEX OF AUTHORS, 1975

A

- Abel, Edward W., and Rowley, Roger J.** Syntheses and properties of aminomethyl complexes of manganese and rhenium, 1096.
- Abu Salah, Omar M., and Bruce, Michael I.** New Group IB metal chemistry. Part 6. Reactions of copper(I) acetylides with chloro(η -cyclopentadienyl)-bis(triphenylphosphine)ruthenium and *cis*-tricarbonylchlorobis(triphenylphosphine)rhenium, 2311.
- Adams, David M., and Payne, S. John.** Spectroscopy at very high pressures. Part III. Raman spectra of complexes $M_2[PtCl_6]$ and the relation of symmetry species to pressure-sensitivity, 215.
- Adams, David M., and Trumble, William R.** Single-crystal vibrational spectrum of hexa(imidazole)cobalt(II) nitrate, 30.
- Adams, John M., Thomas, John M., and Walters, Michael J.** The surface and intercalate chemistry of the layered silicates. Part IV. Crystallographic, electron-spectroscopic, and kinetic studies of the sodium montmorillonite-pyridine system, 1459.
- Addison, Clifford C., Harrison, Philip G., Logan, Norman, Blackwell, Leslie, and Jones, David H.** Mössbauer study of the thermal decomposition of dinitrogen tetroxide solvates of iron(III) nitrate, 830.
- Addison, C. Clifford, Pulham, Richard J., and Trevillion, Edward A.** Reaction between barium and nitrogen in liquid sodium: solubility studies, 2082.
- Adegite, Adeleye.** Kinetics of reaction of vanadium(IV) with chlorine in aqueous solutions, 1199.
- Adegite, Adeleye, and Edeogu, Stella.** Kinetics and mechanism of the oxidation of titanium(III) by aqueous solutions of chlorine, 1203.
- Adlaff, Jean P.** See **Asch, Lilane**, 1235.
- Agarwal, Raghunath P., and Perrin, Douglas D.** Stability constants of complexes of copper(II) ions with some histidine peptides, 268.
- Stability constants of complexes of zinc and cobalt(II) ions with some histidine-containing peptides, 1045.
- Akhmedov, Vagif M., Anthony, Martin T., Green, Malcolm L. H., and Young, Dennis.** Catalytic oligomerisation of butadiene using catalysts derived directly from metal atoms or di(η -arene)-titanium compounds, 1412.
- Albano, Vincenzo G., Sansoni, Mirella, Chini, Paolo, Martinengo, Secondo, and Strumolo, Donatella.** New carbide clusters in the cobalt subgroup. Part II. Crystallographic characterization of the di- μ_3 -carbonyl-hexa- μ -carbonyl-carbidoendecacarbonyl-polyhedro-octarhodium, 305.
- Alcock, Nathaniel W., and Pierce-Butler, Melanie.** Crystal and molecular structures of the tetrakis(diphenylketimine) derivatives of silicon, germanium, and tin, 2469.
- Alcock, Nathaniel W. and Robertson, Glyn B.** Crystal and molecular structure of bis(quinoline)bromine perchlorate, 2483.
- Alcock, Roland M., Hartley, Frank R., Rogers, David E., and Wagner, John L.** Investigation of the species formed on dissolving sodium tetrachloropalladate(II) in glacial acetic acid, 2189.
- Stability of palladium(II)-olefin complexes in glacial acetic acid, 2194.
- Alexander, Iain C.** See **Barker, Marten G.**, 1464.
- Allen, Edward A., and Del Gaudio, John.** Thermochemical behaviour of some tetrahedral dihalogenoditertiary phosphine)cobalt(II) complexes, 1356.
- Al-Mowali, Ali H., and Porte, Andrew L.** Electron paramagnetic resonance spectra of rhenium tetrachloride oxide and some of its adducts, 50.
- Electronic ground states of the trigonal-prismatic rhenium complexes, tris(*cis*-1,2-diphenylethene-1,2-dithiolato)-rhenium, and tris(toluene-3,4-dithiolato)rhenium, 250.
- Al-Mukhtar, Saad E.** See **Fitzsimmons, Brian W.**, 1969.
- Alvey, P. John, Bagnall, Kenneth W., Lopez, Omar Velasquez, and Brown, David.** Sulphoxide complexes of the actinoid(IV) nitrates, 1277.
- Alyea, Elmer C., Costin, Abraham, Ferguson, George, Fey, George T., Geol, Ram G., and Restivo, Roderic J.** Synthesis, crystal, and molecular structure of paramagnetic tri-*t*-butylphosphonium tribromo(tri-*t*-butylphosphine)-nickelate(II), 1294.
- Andersen, Richard A., and Coates, Geoffrey E.** Dimeric bis-(nonafluoro-*t*-butoxy)beryllium and some of its co-ordination complexes, 1244.
- Andrew, John E., Blake, Antony B., and Fraser, Louis R.** Crystal structure of an eight-co-ordinate manganese complex: bis(3,4-di-2-pyridylpyridazine)dinitratomanganese(II), 800.
- Angus, Philip C., and Stobart, Stephen R.** Interconversion of derivatives of germane using heavy-metal salts: synthesis of germyl carboxylates, 2342.
- Anker, Maurice W., Chatt, Joseph, Leigh, G. Jeffery, and Wedd, Anthony G.** Preparation of trichlorotris(tetrahydrofuran)molybdenum(III) and its use in the preparation of complexes of molybdenum(III) and -(0) 2639.
- Annibale, Giuliano, Cattalini, Lucio, and Natile, Giovanni.** Displacement of chelate ligands from planar four-co-ordinate complexes. Part II. Preparation and substitution reactions of dichloro(*NNN'*-tetramethylethylenediamine)- and dichloro(*NNN'*-tetraethylethylenediamine)-gold(III) complexes, 188.
- Anthony, Martin T., Green, Malcolm L. H., and Young, Dennis.** Preparation of zerovalent di(η -arene)titanium compounds using titanium vapour, 1419.
- Anthony, Martin T.** See **Akhmedov, Vagif M.**, 1412.
- Aràneo, Antonio, Morazzoni, Franca, and Napoletano, Tommaso.** Paramagnetic bis(carboxylato)(*p*-tolyl isocyanide)triphenylarsineiridium(II) complexes: preparation and characterisation by spectroscopic and magnetic measurements, 2039.
- Arjomand, Mehran and Machin, David J.** Oxide chemistry. Part I. Ternary oxides containing nickel in oxidation states II, III, and IV. Part II. Ternary oxides containing copper in oxidation states I, II, III, and IV, 1055, 1061.

- Armit, Peter W., Boyd, Alan S. F., and Stephenson, T. Anthony. Synthesis and rearrangement reactions of dihalogenotris- and dihalogenotetrakis-(tertiary phosphine)-ruthenium(II) compounds, 1663.
- Armour, Alan W., Drew, Michael G. B., and Mitchell, Philip C. H. Crystal and molecular structure and properties of ammonium dimolybdate, 1493.
- Arnold, David E. J., and Rankin, David W. H. Preparation and properties of bis(difluorophosphino)- and tris(difluorophosphino)-amine, 889.
- Arrington, Dale E. *N*-(Triphenylphosphoranylidene)sulphamoyl pseudohalides. Part I. Preparation of the azide and its reaction with phosphites and thiophosphites, 1221.
- Arthurs, Michael, Sloan, Malcolm, Drew, Michael G. B., and Nelson, S. Martin. Transition metal-diene complexes. Part II. Isomerization of rhodium-complexed penta-1,4- and *cis*-penta-1,3-dienes, 1794.
- Aruga, Roberto. Thermodynamics of ion pairing of nitrate and chlorate with metal ions in aqueous solution, 2534.
- Asch, Lilane, Shenoy, Gopal K., Friedt, Jean M., and Adloff, Jean P. Mössbauer spectroscopy of hexa-ammineiron(II) nitrate, thiocyanate, and sulphate, 1235.
- Ašperger, Smiljko. See Bradić, Zdravko, 353.
- B**
- Bagnall, Kenneth W., Bhandari, Akshya M., Brown, David, Lidster, Philip E., and Whittaker, Brian. Protactinium(V) and uranium(V) tropolonates, 1249.
- Bagnall, Kenneth W., Du Preez, Jan G. H., Gellatly, Barry J., and Holloway, John H. Pentahalogeno-oxouranates(VI), 1963.
- Bagnall, Kenneth W., Edwards, John, Du Preez, Jan G. H., and Warren, Robert F. Uranium(IV) poly(pyrazol-1-yl)-borate complexes, 140.
- Bagnall, Kenneth W., and Lopez, Omar Velasquez. Amide complexes of thorium(IV), uranium(IV), and dioxouranium(VI) nitrates, 1409.
- Bagnall, Kenneth W. See Alvey, P. John, 1277.
- Bailey, David, and Yesinowski, James P. Fluxional motion in bis(ethane-1,2-dithiolato)nickel(IV) from nematic-phase proton magnetic resonance, 498.
- Bailey, Neil A., Higson, Brian M., and McKenzie, E. Donald. Cobalt(III) compounds of carbanions and their reactivity. Part II. Crystal and molecular structure of malono-nitrilato[propane-1,2-bis(salicylideneiminato)]pyridine-cobalt(III), 1105.
- Baird, Michael C. See Dunham, N. Ann, 774.
- Baker, Edward H. Arsenic triselenide: boiling-point relation at elevated pressures, 1589.
- Baker, Joe, Engelhardt, Lutz M., Figgis, Brian N., and White, Allan H. Crystal structure, electron spin resonance, and magnetism of tris(*o*-phenanthroline)iron(III) perchlorate hydrate, 530.
- Baker, Joe, and Figgis, Brian N. Magnetic properties of some low-spin iron(III) compounds, 598.
- Baker, Ray W. See Irving, Roger J., 1898.
- Balahura, Robert J., Ferguson, George, and Schneider, Michael L. Solid-state and solution conformation of a new cobalt dimer μ -formamido-bis[penta-amminecobalt(III)] pentachloride monohydrate: X-ray and kinetic studies, 603.
- Bamgboye, T. Tunde, Begley, Michael J., and Sowerby, D. Bryan. Crystal structure of 1,*cis*-3,*cis*-5-trichloro-1,3,5,7,7-pentakis(dimethylamino)cyclotetraphosphazene, 2617.
- Bancroft, G. Michael, Butler, K. David, and Sham, Tsun K. Room temperature tin-119 Mössbauer spectra of un-associated tin compounds, 1483.
- Bancroft, G. Michael, Davies, Brian W., Payne, Nicholas C., and Sham, Tsun K. Preparation and spectroscopic studies of five-co-ordinate β -diketonatotri(organo)tin compounds. Crystal structure of (1,3-diphenylpropane-1,3-dionato)triphenyltin(IV), 973.
- Bandoli, Giuliano, and Clemente, Dore A. Preparation and crystal structure of aqua[bis(2-hydroxyphenylimino)-ethanato-*OO'*NN']dioxouranium, 612.
- Bandoli, Giuliano, Clemente, Dore A., Sindellari, Livia, and Tondello, Eugenio. Preparation, properties, and crystal structure of dichlorobis-(*O*-ethyl thiocarbamate)mercury(II), 449.
- Baracco, Livio, Bombieri, Gabriella, Degetto, Sandro, Forsellini, Eleanora, Marangoni, Giampaolo, Paolucci, Gino, and Graziani, Rodolfo. Preparation, characterization, and crystal structure of *cis*-dichloro[*meso*-bis(*trans*-2-hydroxycyclohexyl)sulphide-*OOS*]dioxouranium(VI), 2161.
- Barcelona, Michael J., and Davies, Geoffrey. Neutral transition-metal complexes as probes for solvent structure. The spectrophotometric properties of [NN'-1-methylethylenebis(*o*-aminobenzylideneiminato)]cobalt(II) in some pure and mixed solvents, 1906.
- Barker, Geoffrey K., Lappert, Michael F., Pedley, J. Brian, Sharp, Graham J., and Westwood, Nicholas P. C. Bonding studies of boron and the group 3-5 elements. Part XV. He(I) photoelectron spectra of monomeric Group 3 trihalide, trimethyl, and mixed halogenomethyl species, 1765.
- Barker, Marten G., and Alexander, Iain C. Influence of dissolved nitrogen and carbon on reactions of cerium(III) and cerium(IV) oxides with liquid lithium, 1464.
- Barker, Marten G., and Hooper, Alan J. Reactions of chromium oxides and chromium metal with disodium oxide, 2487.
- Barrow, Michael J., Freer, Andrew A., Harrison, William, Sim, George A., Taylor, Derek W., and Wilson, Francis B. X-Ray crystallographic determination of the molecular structures of π -cyclopentadienyl-[1-hydroxy-2,3,4,5-tetrakis(trifluoromethyl)phosphole-1-oxide]cobalt and tricarbonyl- η^4 -[1-pentafluorophenyl-2,3,4,5-tetrakis(trifluoromethyl)thiophen]manganese, 197.
- Barrow, Michael J., and Sim, George A. Metal-carbonyl and metal-nitrosyl complexes. Part XVI. Comparison of the molecular structures of dicarbonyl(π -cyclopentadienyl)[bis(trifluoromethyl)phosphino]iron, $[(\pi\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})_2\text{P}(\text{CF}_3)_2]$, and its oxidation product, $[(\pi\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})_2\text{P}(\text{O})(\text{CF}_3)_2]$, as determined by X-ray crystallography, 291.
- Bart, Jan C. J., and Daly, John J. Crystal and molecular structure of tetra(methylsilicon) hexasulphide (1,3,5,7-tetramethyl-2,4,6,8,9,10-hexathia-1,3,5,7-tetrasilaadamantane), 2063.
- Barton, Trevor J., and Slade, Roger C. Chemical significance of ligand-field parameters in chromium(III) complexes of quadrature symmetry, 650.
- Barton, Trevor J. See Hughes, Martin N., 1478.
- Basato, Marino. Reaction of di- μ -phenylthio-bis(tricarbonyliron)(Fe-Fe) with triphenylphosphine: a detailed kinetic and mechanistic study, 911.

- Baxter, Allan C., and Williams, David R.** Thermodynamic considerations in co-ordination. Part XXI. Structures of copper(II)-asparaginate, -histidine, and -threoninate ternary complexes in aqueous solution, 1757.
- Beattie, Ian R., Emsley, James W., Lindon, John C., and Sabine, Raymond M.** Structural investigation of the η -allyl group in (η -allyl)tetracarbonylrhenium by nematic-phase nuclear magnetic resonance spectroscopy, 1264.
- Beattie, Ian R., German, Alun, and (in part) Blayden, H. Edwin, and Brumbach, Stephen B.** Xenon dichloride, 1659.
- Beckett, Ronald, and Hoskins, Bernard F.** Crystal structure of a tetrahedral zinc(II) complex of a 1,3-dithiolate: bis(*O*-ethyl thioacetothioacetato)zinc(II), 908.
- Beddoes, Ray.** See **Davies, Colin G.**, 2241.
- Begley, Michael J.** See **Bamgboye, T. Tunde**, 2617.
- Bellerby, John M., and Mays, Martin J.** Organonitriles as ligands in low-spin di[1,2-bis(diethylphosphino)ethane] iron complexes, 1281.
- Benedetti, Enzo.** See **Sbrana, Glauco**, 754.
- Bera, Jaharhal L., Pramanik, Panchanan, and Sen, Debarata.** Magnetic and spectroscopic behaviour of copper(II) complexes of 5-substituted 2-salicylidenebiguanides 2436.
- Berry, Frank J., Kustan, Edward H., and Smith, Barry C.** Tellurium-125 Mössbauer spectra of some aryltellurium(II) and -(IV) compounds, 1323.
- Bertrand, Gary L.** See **Long, Gary J.**, 762.
- Betts, Christopher E., Haszeldine, Robert N., and Parish, R. V. (Dick).** Reactions involving transition metals. Part IX. The structure and isomerism of some dihalogenohydridotris(ligand)rhodium(III) complexes. Part X. Reactions of the complexes α - and β -[L_3RhHX_2] (L = tertiary phosphine or arsine, X = Cl or Br), 2215, 2218.
- Bevan, William I., Haszeldine, Robert N., Middleton, John, and Tipping, Anthony E.** Carbene chemistry. Part VI. Preparation and pyrolysis of (1,1-difluoroethyl)silanes. Part VII. The preparation and pyrolysis of 2-chloro-1,1-difluoroethyl-, 1-chloro-1,2,2-trifluoroethyl-, and 1,2-dichloro-1,2-difluoroethyl-trichlorosilanes, 252, 620.
- Bhaduri, Sumit.** See **Williams, Alan F.**, 1958.
- Bhandari, Akshya M.** See **Bagnall, Kenneth W.**, 1249.
- Bhandary, K. Krishna, Manohar, Hattikudur, and Venkatesan, Kailasam.** Crystal and molecular structure of tris(dimethyl sulphoxide)trinitratoytterbium, 288.
- Bianchini, Claudio, Fabbrizzi, Luigi and Paoletti, Piero.** Flow microcalorimetry in stepwise equilibria of metal complexes. Reactions of NN' - and NN -diethylethylenediamine with hydrogen and copper(II) ions, 1036.
- Biddlestone, Malcolm, and Shaw, Robert A.** Phosphorus-nitrogen compounds. Part XLII. Reactions of PPP -triphenylphosphazene with organic acid halides and mononuclear phosphorus halides, 2527.
- Biddlestone, Malcolm.** See **Nabi, Syed Nurun**, 2634.
- Birchall, Thomas, Connor, Joseph A. and Hillier, Ian H.** High-energy photoelectron spectroscopy of some antimony compounds 2003.
- Birchall, Thomas, and Pereira, Angelo R.** Nuclear magnetic resonance and Mössbauer spectra of some organotin anions, 1087.
- Blackwell, Leslie J., Nunn, Ernest K., and Wallwork, Stephen C.** Crystal structure of anhydrous nitrates and their complexes. Part VII. 1,5 Dinitrogen tetroxide solvate of iron(III) nitrate, 2068.
- Blackwell, Leslie.** See **Addison, Clifford C.**, 830.
- Blake, Antony B., and Fraser, Louis R.** Crystal structure and mass spectrum of μ_3 -oxo-hexakis(μ -trimethylacetato)-trisethanoltri-iron(III) chloride, a trinuclear basic iron(III) carboxylate, 193.
- Blake, Antony B.** See **Andrew, John E.**, 800.
- Blandamer, Michael J., Burgess, John, and Morris, Stephen H.** Investigation of the effects of added salts on the rate of hydrolysis of sulphur trioxide-trimethylamine, 2118.
- Blayden, H. Edwin.** See **Beattie, Ian R.**, 1659.
- Boas, John F.** See **De Bolfo, Joan A.**, 1523.
- Bojes, Joe, and Chivers, Tristram.** Sulphur-nitrogen anions: formation from azide ion and elemental sulphur and their role in the synthesis of cyclic sulphur imides, 1715.
- Bombieri, Gabriella, Brown, David, and Graziani, Rodolfo.** Crystal and molecular structure of tetrachlorobis(triphenylphosphine oxide)uranium(IV), 1873.
- Bombieri, Gabriella, Moseley, Patrick T., and Brown, David.** Crystal structure of tetracaesium octaisothiocyanatouranate(IV), 1520.
- Bombieri, Gabriella.** See **Baracco, Livio**, 2161.
- Bonamico, Mario, Dessy, Giulia, Fares, Vincenzo, and Scaramuzza, Lucio.** Structural studies of eight-coordinate metal complexes. Part II. Crystal and molecular structure of tetrakis(dithiobenzoato)molybdenum(IV), 2079.
- Structural studies of metal complexes with sulphur-containing bidentate ligands. Part I. Crystal and molecular structures of trimeric bis(dithiobenzoato)-nickel(II) and -palladium(II), 2250.
- Crystal structure of μ^I , μ^{II} , μ^{III} -tris(dithioacetato)- μ_3 -trithio-orthoacetato-triangulo-trinickel(II) in two crystalline forms, 2594.
- Bond, Alan Lewis, Brian, and Green, Michael.** Reactions of co-ordinated ligands. Part V. The addition of tetrafluoroethylene to tricarbonyl(diene)iron, tricarbonyl-(*trans*-cinnamaldehyde)iron and tricarbonyl(*o*-styryldiphenylphosphine)iron complexes, 1109.
- Boorman, P. Michael, Garner, C. David, and Mabbs, Frank E.** Formation of and equilibria between some five- and six-co-ordinate chloro-oxomolybdenum(V) complexes in dichloromethane, 1299.
- Booth, Brian L., Casey, Geoffrey C., and Haszeldine, Robert N.** Metal carbonyl chemistry. Part XXIII. Dichlorocarbene formation during the reactions of octacarbonyldicobalt with chlorinated hydrocarbons, 1850.
- Booth, Brian L., Gardner, Michael, and Haszeldine, Robert N.** Metal carbonyl chemistry. Part XXIV. Reactions of methyl- and phenyl-pentacarbonylmanganese with dicyclopentadiene and other dienes. Part XXV. Reactions of acetyl- and benzoyl-pentacarbonylmanganese with dicyclopentadiene, 1856, 1863.
- Booth, Brian L., Haszeldine, Robert N., and Inglis, Tom.** Metal carbonyl chemistry. Part XX. A novel method for the synthesis of nonacarbonyl(fluoroalkylcarbon)-tricobalt derivatives, 1449.
- Booth, Brian L., Haszeldine, Robert N., and Perkins, Ian.** Metal carbonyl chemistry. Part XXI. A comparison of the reactivities of the anions $[M(CO)_4(PPh_3)_2]^-$ (M = Co, Rh or Ir) towards fluoroaromatic compounds. Part XXII. Some reactions of the anions $[M(CO)_4(PPh_3)_2]^-$ (M = rhodium or iridium) with fluoro-olefins and hexafluorobut-2-yne, 1843, 1847.
- Booth, Brian L., Haszeldine, Robert N., and Tucker, Neil I.** Metal carbonyl chemistry. Part XVIII. Preparation and reactions of some transition metal derivatives of

- hexafluorobicyclo[2.2.0]hexa-2,5-diene. Part XIX. Diels-Alder reactions of the π -cyclopentadienyldicarbonyliron derivative of hexafluorobicyclo[2.2.0]hexa-2,5-diene, 1439, 1446.
- Borrell, Peter and Henderson, Eric.** Photochemistry of the charge-transfer complex between ruthenocene and carbon tetrachloride, 432.
- Bossa, Mario, Maraschini, Francesco, Flamini, Alberto, and Semprini, Elvio.** Semiempirical calculations on the electronic structure and molecular energy levels of complex compounds, 596.
- Bosworth, Yvonne M., and Clark, Robin J. H.** Resonance Raman and electronic spectra of different salts of the $[\text{AuBr}_4]^-$ ion, 381.
- Bosworth, Yvonne M., Clark, Robin J. H., and Turtle, Philip C.** Resonance Raman excitation profiles of the tetrathiocyanatocobaltate(II) ion, 2027.
- Bottomley, Frank.** Crystal and molecular structures of potassium pentachloro- and pentabromo-nitrosyliridate hydrate, 2538.
- Bottomley, Frank, Kiremire, Enos M. R., and Clarkson, Steven G.** Formation of penta-ammine(dinitrogen)- and *cis*-tetra-amminehydroxynitrosyl-ruthenium from penta-amminenitrosylruthenium and hydroxide ion, 1909.
- Bottrill, Martin, Goddard, Richard, Green, Michael, Hughes, Russel P., Lloyd, Malcolm K., Taylor, Susan H., and Woodward, Peter.** Reactions of co-ordinated ligands. Part X. Reactions of trifluoroacetonitrile with π -allylic complexes of iridium(II) and with dicarbonyl(cyclopentadienyl)methyliron: the molecular and crystal structure of carbonyl(η -cyclopentadienyl)-1-[(1-iminotrifluoroethyl)-imino]trifluoroethyl- N° -iron, 1150.
- Bowmaker, Graham A., Waters, T. Neil, and Wright, Peter E.** E.s.r. and optical spectral properties of copper(II) complexes with Schiff-base ligands derived from *o*-amino-benzaldehyde, 867.
- Boyd, Alan S. F.** See Armit, Peter W., 1663.
- Braca, Giuseppe.** See Sbrana, Glauco, 754.
- Bradić, Zdravko, Pribanić, Marijan, and Ašperger, Smiljko.** Kinetics and mechanism of replacements in pentacyano-(ligand)ferrate(II) ions, 353.
- Braibanti, Antonio, Mori, Giovanni, Dallavalle, Francesco, and Leporati, Enrico.** Protonation of DL-4-amino-3-hydroxybutanoic acid and its complexing capacity with copper(II) ions in aqueous solution, 1319.
- Braithwaite, Andrew C., Rickard, Clifton E. F., and Waters, T. Neil.** Crystal and molecular structure of μ -chlorochlorobis[3,4-bis(2-aminoethylthio)toluene]dicopper(II) diperchlorate, 1817.
- Imine hydrolysis reactions in copper(II) complexes of NN' -ethylenebis-(thiophen-2-carbaldimine) and -(pyridine-2-carbaldimine), 2149.
- Bramman, Paul F., Lund, Trevor, Raynor, J. Barrie, and Willis, Christopher J.** Electron spin resonance studies on some perfluoropinacولات of vanadium(IV) and chromium(V), 45.
- Breakell, Kenneth R., Patmore, David J., and Storr, Alan.** Synthesis of pyrazolyl-borate, -aluminate, -gallate, and -indate ligands, and their chelating properties towards cobalt(II), nickel(II), copper(II), and zinc(II), 749.
- Breakell, Kenneth R., Rendle, David F., Storr, Alan, and Trotter, James.** Dialkyl(2-methylimidazolyl)metal tetramers of Group III elements: crystal and molecular structure of tetrakis- μ -(2-methylimidazolyl)-tetrakis(dithylgallium), 1584.
- Brice, Vincent T., and Shore, Sheldon G.** 2,3- μ -Bis(tri-phenylphosphine)cuprio-pentaborane(9), -1-methylpentaborane(9), and -4-methylpentaborane(9), 334.
- Bright, David.** See De Boer, Janjaap J., 662.
- Brisdon, Brian J., and Griffin, Gerald F.** (1- η -3-Allyl)-dicarbonyl-molybdenum(II) and -tungsten(II) complexes and their reactions with some chelating anions, 1999.
- Britnell, David, Fowles, Gerald W. A., and Rice, David A.** Adducts of molybdenum(V) trichloride sulphide, 28.
- Reaction of tungsten(VI) tetrachloride sulphide and selenide and the analogous bromides with a range of donor molecules, 213.
- Brookes, Anthony, Knox, Selby A. R., Riera, Victor, Sosinsky, Barrie A., and Stone, F. Gordon A.** Hydrocarbon complexes of ruthenium. Part V. Reactions of trimethylsilyl- and trimethylgermyl-carbonylruthenium complexes with cycloheptatrienes, 1641.
- Brookes, Glenn, and Pettit, Leslie D.** Thermodynamics of complex formation between hydrogen, copper(II), and nickel(II) ions and dipeptides containing non-co-ordinating substituent groups, 2106.
- Thermodynamics of formation of complexes of copper(II) and nickel(II) ions with glycylhistidine, β -alanylhistidine, and histidylglycine, 2112.
- Stereoselective complex formation between simple dipeptides and hydrogen and copper(II) ions, 2302.
- Brown, David, Whittaker, Brian, and Tacon, John.** Preparation and properties of trichlorobis(pentane-2,4-dionato)-protactinium(V), tetrakis(1,3-diphenylpropane-1,3-dionato)protactinium(IV), and tetrakis(pentane-2,4-dionato)actinoid(IV) complexes, 34.
- Brown, David.** See Alvey, P. John, 1277, Bagnall, Kenneth W., 1249, Bombieri, Gabriella, 1520, 1873, and Fuger, Jean, 2256.
- Brown, Michael P., Holliday, A. Kenneth, and Way, G. Martin.** Pyrolysis of trimethylborane. Part I. The preparation and properties of 2,4,6,8,9,10-hexamethyl-2,4,6,8,9,10-hexaboro-adamantane, 148.
- Bruce, Michael I., Goodall, Brian L., Sheppard, Geoffrey L., and Stone, F. Gordon A.** Cyclometallation reactions. Part 10. Some reactions of polyfluorinated azobenzenes: metallation by fluorine abstraction, 591.
- Bruce, Michael I., Goodall, Brian L., and Stone, F. Gordon A.** Cyclometallation reactions. Part 11. Reactions of tricarbonyl[2-(phenylazo)phenyl- C^1N^1]cobalt and related complexes with hexafluorobut-2-yne, 1651.
- Bruce, Michael I.** See Abu Salah, Omar M., 2311.
- Brumbach, Stephen B.** See Beattie, Ian R., 1659.
- Buck, Dorothy M. W., and Moore, Peter.** Kinetics of the acid and mercury(II)-ion induced dissociations of some nickel(II) chelate complexes of substituted pyridine ligands in dimethyl sulphoxide solution, 409.
- Buckle, John, Harrison, Philip G., King, Trevor J., and Richards, John A.** Structural studies in main-group chemistry. Part IX. Crystal structure of chlorotrimethyl(triphenylphosphoranylideneacetone)tin(IV), 1552.
- Budó-Záhonyi, Éva.** See Rockenbauer, Antal, 1729.
- Bullock, Joseph I., and King, Margaret E.** Chemistry of the trivalent actinoids. Part IV. Nephelauxetic effects as a guide to complex formation for uranium(III) and neptunium(III), 1360.
- Burgess, John, and Cartwright, S. James.** Solubility of caesium hexachlororhenate(IV) and hexabromorhenate(IV) in water and in mixed aqueous solvents, 100.

- Burgess, John, Haines, Robert I., Hamner, E. Roger, Kemmitt, Raymond D. W., and Smith, Martin A. R. Kinetics of ring opening of substituted cyclobutenediones by platinum(0) complexes, 2579.
- Burgess, John, and Peacock, Raymond D. Enthalpies of solution of triphenyl derivatives of the group 5 elements, 1565.
- Burgess, John. See Blandamer, Michael J., 2118, and Lucie, Jean Michel, 245.
- Burrows, Edward L., Harland, Lesley, and Kettle, Sidney F. A. Vibrational spectra of crystalline hexacarbonylchromium, -molybdenum, and -tungsten in the 4 000 cm^{-1} region, 2353.
- Burt, Jennifer C., Knox, Selby A. R., and Stone, F. Gordon A. Hydrocarbon complexes of ruthenium. Part III. Reactions of cycloheptatrienes with ruthenium carbonyl, 731.
- Busetto, Carlo. See Cariat, Franco, 556.
- Bushnell, Gordon W., Pidcock, Alan, and Smith, Martin A. R. *cis*- and *trans*-Influences in platinum(II) complexes. X-Ray crystal structure analysis of tetraethylammonium trichloro(triethylphosphine)platinate(II), 572.
- Butcher, Raymond J., Gunz, Hugh P., MacLagan, Robert G. A. R., Powell, H. Kipton J., Wilkins, Cuthbert J., and Hian, Yong Shim. Infrared spectra and configurations of some molybdenum(VI) dihalide dioxide complexes, 1223.
- Butcher, Ray J., and Sinn, Ekk. Crystal and molecular structures of dichloromethane-solvated tris(morpholinocarbodithioato)-complexes of chromium(III), manganese(III), and rhodium(III). Comparison of co-ordination spheres, 2517.
- Butler, K. David. See Bancroft, G. Michael, 1483.
- Buttenshaw, A. Juliet, Duchêne, Michael, and Webster, Michael. Crystal and molecular structure of quinolinium trichlorodimethylstannate(IV), 2230.
- Buttery, H. J., Kettle, Sidney F. A., and Paul, I. Solid state studies. Part VII. A single-crystal Raman study of the vibration of the $\text{Cr}(\text{CO})_3$ unit in hexa- and pentamethylbenzenetricarbonylchromium, 969.
- Byerley, John J., Fouda, Safaa A., and Rempel, Garry L. Activation of copper(II) ammine complexes by molecular oxygen for the oxidation of thiosulphate ions, 1329.
- C
- Cairns, Maxwell A., Dixon, Keith R., and McFarland, John J. Fluoro-complexes of platinum metals, 1159.
- Calvo, Crispin. See Roe, David M., 125.
- Camellini, Marisa Tiripicchio. See Lanfredi, Anna Maria Manotti, 2168.
- Campbell, Ian L. C., and Stephens, Frederick S. Crystal and molecular structure of di- μ -carbonyl-(tricarbonylcobaltio)carbonyl(π -cyclopentadienyl)iron, 22.
- Crystal and molecular structure of di- μ -carbonyl-(carbonyl- π -norbornadienecobaltio)carbonyl- π -cyclopentadienyliron, 226.
- Crystal and molecular structure of di- μ -carbonyl-di-carbonyl(π -cyclopentadienylnickelio)(tris-*p*-fluorophenylphosphine)cobalt, 340.
- Crystal and molecular structure of *cis*-(isobutyl isocyanide)di- μ -carbonylcarbonylbis(π -cyclopentadienyl)-di-iron, 982.
- Camus, Annamaria, Marsich, Nazario, Nardin, Giorgio, and Randaccio, Lucio. Reactions between arylcopper compounds and dinitrophenylmethane. Synthesis and crystal structure of α -nitro- α -*aci*-nitrotolueneatobis(triphenylphosphine)copper(I), 2560.
- Cardaci, Giuseppe. See Sorriso, Salvatore, 1041.
- Cariat, Franco, Galizzioli, Dario, Morazzoni, Franca, and Busetto, Carlo. New adducts of phthalocyaninato-cobalt(II) with pyridine and 4-methylpyridine and their vibrational, magnetic, and electronic properties. Part I. Reactivity towards oxygen, 556.
- Carlotti, Maria E. See Pelizzetti, Ezio, 794.
- Carroll, W. Eamon, Green, Michael, Stone, F. Gordon A., and Welch, Alan J. Metallaborane chemistry. Part III. Oxidative-insertion reactions of eleven-atom monocarbon carbaborane species with zerovalent nickel, palladium, and platinum complexes; the molecular and crystal structure of 1,1-bis(*t*-butyl isocyanide)-2-(trimethylamine)-2-carba-1-pallada-*closa*-decaborane(10), 2263.
- Cartner, Anthony. See Gardner, Peter J., 2582.
- Cartwright, S. James. See Burgess, John, 100.
- Carty, Arthur J. See Taylor, Nicholas J., 438.
- Casey, Geoffrey C. See Booth, Brian L., 1850.
- Casper, Anne, and Fazakerley, G. Victor. Purines. Part I. Kinetics of interaction of nickel(II) with some purine bases and nucleosides, 1977.
- Cassar, Luigi. See Foà, Marco, 2572.
- Cassidy, John E., Jarvis, John A. J., and Rother, Roger N. Preparation, characterisation, and crystal and molecular structure of a novel tetrameric aluminium phosphate complex: $[\{\text{Al}(\text{PO}_4)(\text{HCl})(\text{C}_2\text{H}_5\text{OH})_4\}]_4$, 1497.
- Cattalini, Lucio, Cusumano, Matteo, Ricevuto, Vittorio, and Trozzi, Marcello. Fast reactions at planar four-coordinate complexes. Part II. The leaving-group effect in palladium(II) complexes, of 3-azapentane-1,5-diamine, 771.
- Cattalini, Lucio. See Annibale, Guiliano, 188, and Maresca, Luciana, 1601.
- Catherick, Janet, and Thornton, Peter. Synthesis, magnetic properties, and electronic spectra of complexes of nickel(II) carboxylates with pyridine and related ligands, 233.
- Catton, Graham A., Hart, F. Alan, and Moss, Gerard P. Studies of the conformations of the n.m.r. shift reagent tris(2,2,6,6-tetramethylheptane-3,5-dionato)europium(III) and its adducts by means of fluorescence spectra, 221.
- Cenini, Sergio. See Keubler, Michael, 1081.
- Chatt, Joseph, Dilworth, Jonathan R., and Ito, Takashi. Anomalous hydrogen-1 and carbon-13 spectra of some new *N*-acyl-*N'*-aryldiazene complexes of osmium, 2348.
- Chatt, Joseph, Elson, Clive M., Hooper, Norman E., and Leigh, G. Jefferey. On the charge distribution in complexes, 2392.
- Chatt, Joseph. See Anker, Maurice W., 2639.
- Cherwinski, Walter J., Johnson, Brian F. G., Lewis, Jack, and Norton, Jack R. Carbon-13 nuclear magnetic resonance spectra of some carbon-13 monoxide derivatives of platinum(II), 1156.
- Chew, K. Frank, Healy, Michael A., Khalil, Mutasim I., Logan, Norman, and Derbyshire, William. Nitrogen-14 nuclear magnetic resonance study of some diamagnetic covalent metal nitrates, 1315.
- Chhabra, Vinay Kumar. See Mohan, Devendra, 1737.
- Chiari, Brunetto. See Tarantelli, Turiddu, 286.
- Chieh, Peter C. See Taylor, Nicholas, 438.
- Chikira, Makoto. See Yokoi, Hiroshi, 2101.
- Chini, Paolo. See Albano, Vincenzo W., 305.

- Chipperfield, John R., Ford, James, and Webster, David E.** Reactivity of main-group-transition-metal bonds. Part I. Kinetics of iodination of tricarbonyl(η -cyclopentadienyl)(trimethylstannyl)-molybdenum and -tungsten, dicarbonyl(η -cyclopentadienyl)(trimethylstannyl)iron, and pentacarbonyl(trimethylstannyl)manganese, 2042.
- Chipperfield, John R., Hayter, Andy C., and Webster, David E.** Reactivity of main-group-transition-metal bonds. Part II. The kinetics of reaction between tricarbonyl(η -cyclopentadienyl)(trimethylstannyl)chromium and iodine, 2048.
- Chivers, Tristram.** See **Bojes, Joe**, 1715.
- Christopher, Roger E., and Gans, Peter.** Force-constant computations. Part V. Use of force-constant computations as an aid to frequency assignment in hexachlorocyclotriphosphazene, 153.
- Chua, Kee L.** See **Lim, Yau Y.**, 1917.
- Ciampolini, Mario, Mengozzi, Carlo, and Orioli, Pierluigi.** Structure and magnetic properties of bis(diethyldithiocarbamato)manganese(II), 2051.
- Ciani, Gianfranco, Giusto, Domenico, Manassero, Mario, and Sansoni, Mirella.** Nitrosyl complexes of rhenium. Crystal and molecular structures of the tetraethylammonium salts of tetrabromo(ethanol)nitrosylrhenate(II) and of acetone-tris(tetrabromonitrosylrhenate(II)), 2156.
- Clague, A. Derek H., and Masters, Christopher.** Use of carbon-13 nuclear magnetic resonance spectroscopy for determining the position of deuterium incorporation into simple alkenes and into tertiary phosphine complexes of platinum(II), 858.
- Clare, Philip, Sowerby, D. Bryan, Harris, Robin K., and Wazeer, Mohamed I. M.** Relationships of nuclear magnetic resonance parameters to structure for cyclo-triphosphazatrienes, 625.
- Clark, George R., Waters, Joyce M., and Whittle, Kenneth R.** Crystal and molecular structure of hydroxodinitrosylbis(triphenylphosphine)osmium(II) hexafluorophosphate, 463.
- Crystal and molecular structure of dicarbonylnitrosylbis(triphenylphosphine)osmium(0) perchlorate-dichloromethane, 2233.
- Crystal and molecular structure of acetatocarbonyl(*N*-*p*-tolylformimidoyl)bis(triphenylphosphine)ruthenium(II), 2556.
- Clark, James H., and Emsley, John.** Reactions of potassium fluoride in glacial acetic acid with chlorocarboxylic acids, amides, and chlorides. The effect of very strong hydrogen bonding on the nucleophilicity of the fluoride anion, 2129.
- Clark, Michael G., Gancedo, J. Ramon, Maddock, Alfred G., and Williams, Alan F.** Mössbauer study of octacyanotungstate anions, 120.
- Clark, Robin J. H., and Stockwell, James A.** Complexes of Group VI hexacarbonyls with Group V ligands containing an olefinic side-chain, 468.
- Clark, Robin J. H.** See **Bosworth, Yvonne M.**, 381, 2027.
- Clark, Ronald J.** See **Head, Robert A.**, 2054.
- Clarkson, Steven G.** See **Bottomley, Frank**, 1909.
- Claxton, Thomas A., Fulham, Brian W., Platt, Eric, and Symons, Martyn C. R.** Phosphoranyl(PH_4) and diphosphine(P_2H_6^+) radicals, 1395.
- Clegg, William, Greenhalgh, Douglas A., and Straughan, Brian P.** Crystal structure and vibrational spectroscopy of hexa-amminechromium(III) pentachloromercurate(II), 2591.
- Clemente, Dore A.** See **Bandoli, Giuliano**, 449, 612.
- Coates, Geoffrey E.** See **Anderson, Richard A.**, 1244.
- Cockle, Stephen A., Hensens, Otto D., Hill, H. Allen O., and Williams, Robert J. P.** The temperature dependence of some physical properties of cobinamides and cobalamins, 2633.
- Cockle, Stephen A., Hensens, Otto D., Hill, H. Allen O., and Williams, Robert J. P.** The temperature dependence of some physical properties of cobinamides and cobalamins, 2633.
- Coe, John S., and Unsworth, John B. J.** Kinetic studies on homogeneous oxidation of olefins with palladium(II) catalysts, 645.
- Coffen, David L.** See **Long, Gary J.**, 762.
- Cohen, Haim, and Meyerstein, Dan.** Comparison between the inter- and intra-molecular kinetics of reduction of penta-ammine(ligand)cobalt(III) complexes by the *para*-nitrobenzoate radical: a pulse-radiolytic study, 2477.
- Colamarino, Paolo, and Orioli, Pier Luigi.** Crystal and molecular structure of *cis*- and *trans*-dichlorobispyridine-platinum(II), 1656.
- Cole-Hamilton, David J., Stephenson, T. Anthony, and Robertson, Donald R.** Metal complexes of sulphur ligands. Part IX. Synthesis of dimethylphosphine-dithioato-complexes of ruthenium(II) containing bidentate donor ligands, 1260.
- Coles, Brian F., Hitchcock, Peter B., and Walton, David R. M.** Crystal and molecular structure of 1,8-bis(trimethylsilyl)octatetrayne, 442.
- Connelly, Neil G., Demidowicz, Zenon, and Kelly, Raymond L.** Reactions of tricarbonyl(η -hexamethylbenzene)-chromium derivatives with nitrosonium and benzenediazonium ions: reversible oxidation *versus* nitrosyl- or areneazo-complex formation, 2335.
- Connor, Joseph A., and Hudson, Gerald A.** Studies of chelation. Part III. Complexes of chromium and molybdenum tetra- and penta-carbonyls with *S*-substituted 1,2-dimercaptoethane compounds. Electronic influences on chelate-ring formation, 1025.
- Connor, Joseph A.** See **Birchall, Thomas**, 2003.
- Conti, Franco.** See **Keubler, Michael**, 1081.
- Conway, Anthony J., Gainsford, Graeme J., Schrieke, Roy R., and Smith, J. David.** Complexes of organoaluminium compounds. Part VIII. Crystal and molecular structure, infrared and nuclear magnetic resonance spectra, and reactions of di- μ -(tricarbonyl- η^5 -cyclopentadienyltungsten-*OO'*)-bisdimethylaluminium and the characterisation of some phosphine derivatives, 2499.
- Conway, Anthony J., Hitchcock, Peter B., and Smith, J. David.** Reaction of trimethylgallium with tricarbonyl- η^5 -cyclopentadienyl-hydridotungsten and with dicarbonyl- η^5 -cyclopentadienylhydrido(triphenylphosphine)-tungsten. Crystal and molecular structure of μ_2 -gallio-tris-(tricarbonyl- η^5 -cyclopentadienyltungsten), 1945.
- Cook, John A., Drew, Michael G. B., and Rice, David A.** Crystal and molecular structure of bis[*aci*-nitromethyl]-benzenato](*NNN'*-tetramethyl-1,2-diaminoethane)-nickel(II), 1973.
- Cooke, Clive G., and Mays, Martin J.** Reaction of $[\text{HFe}(\text{CO})_2]_2$ with phosphorus donor ligands, 455.
- Cooke, Michael, Russ, Charles R., and Stone, F. Gordon A.** Chemistry of the metal carbonyls. Part LXX. Trimethylsilyl, trimethylgermyl, and trimethylstannyl derivatives of cyclo-octatetraene and their complexes with the tricarbonyliron group, 256.

- Corain, Benedetto, and Favero, Giancarlo.** Synthesis and reactivity of organometallic nickel(II) complexes obtained by oxidation of nickel(0) complexes with halogenated organic compounds, 283.
- Cornwell, Anthony B., and Harrison, Philip G.** Derivatives of bivalent germanium, tin, and lead. Part VII. Chromium, molybdenum, and tungsten pentacarbonyl complexes of tin(II) bis(β -ketoenolates), 1486.
- Derivatives of divalent germanium, tin, and lead. Part IX. Tin(II) derivatives of alkyl acetoacetates, 4-phenylbutane-2,4-dione, 1,3-diphenylpropane-1,3-dione, cyclohexane-1,2-and -1,3-diones, and 2-hydroxycyclohepta-2,4,6-trien-1-one, 1722.
- Derivatives of bivalent germanium, tin, and lead. Part XI. The interaction of tin(II) halides and bis(β -ketoenolates) with di-iron enneacarbonyl, 2017.
- Corrie, Anna M., Makar, George K. R., Touche, Murray L. D., and Williams, David R.** Thermodynamic considerations in co-ordination. Part XX. A computerised approach as an alternative to graphical normalised curve fitting as a means of detecting oligonuclear complexes in metal ion-ligand solutions and its application to the zinc(II)-, lead(II)-, and proton-glycine peptide systems, 105.
- Costa, Giacomo.** See **Dreos, Renata**, 2329.
- Costin, Abraham.** See **Altya, Elmer C.**, 1294.
- Courtis, Barbara, Dent, Stephen P., Eaborn, Colin, and Pidcock, Alan.** Interaction of acyl chlorides and triethylsilane catalysed by rhodium complexes, 2460.
- Cradock, Stephen, Ebsworth, E. A. V., and Hosmane, Narayan.** Reactions of tin(IV) chloride with silyl compounds. Part I. Reactions with inorganic silyl compounds, 1624.
- Cradock, Stephen, Ebsworth, E. A. V., Meikle, George D., and Rankin, David W. H.** Preparation properties, and molecular structure of silylsulphinyllamine, 805.
- Cradock, Stephen, Ebsworth, E. A. V., Moretto, Hans, and Rankin, David W. H.** Photoelectron spectra and fluxional behaviour in some σ -cyclopentadienes, 390.
- Cradock, Stephen, Ebsworth, E. A. V., and Muir, Irene B.** Photoelectron spectra and bonding of (*N-B*)-2,8,9-trioxo-5-aza-1-borabicyclo[3.3.3]undecane (boratran) and some 2,8,9-trioxo-5-aza-1-silabicyclo[3.3.3]undecanes (silatrans), 25.
- Cradwick, Peter D., and De Endredy, Andrew S.** Crystal structure of aluminium iodate nitrate hexahydrate, 1926.
- Cragg, R. Harry, and Weston, Alan F.** Organoboron compounds. Part IX. Synthesis and properties of some 2-phenyl-1,3,2-oxazaborolans. Part X. Polycyclic borazones, 93, 1761.
- Crane, Glen R.** See **Tofield, Bruce C.**, 1806.
- Creaser, Colin S., and Creighton, J. Alan.** Pentachloro- and pentabromo-titanate(IV) ions, 1402.
- Creighton, J. Alan.** See **Creaser, Colin S.**, 1402.
- Critchlow, Peter B., and Robinson, Stephen D.** Complexes of the platinum metals. Part VI. Dithiocarbamate- and *O*-alkyl dithiocarbamate-derivatives of ruthenium, osmium, and iridium, 1367.
- Crookes, John V., and Woolf, Alfred A.** Hydrogensulphates of silver(I) and some transition-metal cations, 2060.
- Cullen, William R., Pomeroy, Roland K., Sams, John R., and Tsin, Tsang B.** Tin-119 Mössbauer study of complexes with chlorine-bridged tin-molybdenum and tin-tungsten bonds, 1216.
- Cunninghame, Anthony.** See **Gardner, Peter J.**, 2582.
- Curtis, Neil F.** Some metal-ion complexes with ligands formed by reaction of amines with aliphatic carbonyl compounds. Part VI. Formation of *cis*-di-isothiocyanato[4,6,6-trimethyl-1,9-bis(2-pyridyl)-3,7-diazanon-3-ene]nickel(II), 91.
- Curtis, Neil F.** See **Martin, John W. L.**, 87.
- Cusumano, Matteo.** See **Cattalini, Lucio**, 771.

D

- Dagleish, William H., Keat, Rodney, Porte, Andrew L., Tong, David A., Masood-Ul-Hasan, and Shaw, R. A.** Use of chlorine-35 nuclear quadrupole resonance spectroscopy for structural assignments in chlorocyclotriphenylazatrienes, 309.
- Dallavalle, Francesco.** See **Braibanti, Antonio**, 1319.
- Dal Negro, Alberto, Rossi, Giuseppe, and Perotti, Angelo.** Crystal structure of potassium tetra-acetateborate, 1232.
- Daly, John J.** See **Bart, Jan C. J.**, 2063, and **Green, Michael**, 1118.
- Dance, Nigel S., and McWhinnie, William R.** Isotopic studies by vibrational spectroscopy of the tellurium-carbon bond in diaryltellurium dihalides, 43.
- Darragh, John I., Hossain, Syed F., and Sharp, David W. A.** Aryloxysulphur(IV) fluorides, 218.
- Das, Manoranjan, and Livingstone, Stanley E.** Dipole-moment measurements of metal chelates. Part II. Dipole moments of nickel(II), palladium(II), platinum(II), and cobalt(III) complexes of six fluorinated mercapto- β -diketones, 452.
- Das, Manoranjan.** See **Filipcuk, Stephen W.**, 886.
- Das, Rebati Charan.** See **Satyanaarayana, Doki**, 2236.
- Dash, Anadi C., Nanda, Raleindra K., and Mohapatra, Sunesh K.** Kinetics and mechanism of elimination of chloride from *cis*-chlorobis(ethylenediamine)(glycinato-N)cobalt(III) ion: a study of copper(II)-ion catalysis, 897.
- Da Silva, Manuel A. V. Ribeiro.** See **Irving, Roger J.**, 798, 1257.
- Davey, Geoffrey.** See **Whitlow, Simon H.**, 1228.
- Davidson, John L., and Sharp, David W. A.** Metal perfluoro-alkane- and -arene-thiolates. Part III. Cyclopentadienylcobalt derivatives. Part IV. The reactions of some manganese, iron, and cobalt derivatives with alkynes, 813, 2283.
- Interaction of tricarbonyl(π -cyclopentadienyl)molybdenum halides and acetylenes, 2531.
- Davies, Brian W.** See **Bancroft, G. Michael**, 973.
- Davies, Colin G., Donaldson, John D., Laughlin, David R., Howie, R. Alan, and Beddoes, Roy.** Crystal structure of tritin(II) dihydroxide oxide sulphate, 2241.
- Davies, Geoffrey.** See **Barcelona, Michael J.**, 1906.
- Davies, J. Eric D., and Sandford, William F.** Solid-state vibrational spectroscopy. Part IV. A vibrational and differential scanning calorimetry study of the polymorphism of sodium and potassium sulphates, 1912.
- Davies, J. Eric D., and Wood, William J.** Clathrate and inclusion compounds. Part III. The infrared and Raman spectra of some β -quinol (hydroquinone) clathrates, 674.
- Day, Peter.** See **Gregson, Anthony K.**, 1306.
- De Boer, Janjaap J., and Bright, David.** Structures of 1,2-dimethyl- and 3-methyl-cyclopropenebis(triphenylphosphine)platinum(0), 662.
- De Bolfo, Joan A., Smith, Thomas D., Boas, John F., and Pilbrow, John R.** An electron spin resonance study of

- the aggregation of copper(II) water-soluble porphyrins, 1523.
- Deeming, Antony J., Hasso, Sundus, and Underhill, Mark.** Reactions of acetylene, methyl- and phenyl-substituted acetylenes, and ethylene with 1,1,1,1,2,2,2,3,3,3-decacarbonyl-2,3-di- μ -hydrido-triangulo-triosmium, 1614.
- Deeming, Antony J.** See **Yin, Candido Choo**, 2091.
- De Endredy, Andrew S.** See **Cradwick, Peter D.**, 1926.
- Degetto, Sandro.** See **Baracco, Livio**, 2161.
- Del Gaudio, John.** See **Allen, Edward A.**, 1356.
- Demidowicz, Zenon.** See **Connelly, Neil G.**, 2335.
- Dent, Stephen P., Eaborn, Colin, and Pidcock, Alan.** Interaction of acyl chlorides and triethylsilane catalysed by *cis*-dichlorobis(triphenylphosphine)platinum(II) and related complexes, 2646.
- Dent, Stephen P.** See **Courtis, Barbara**, 2460.
- Derbyshire, William.** See **Chew, K. Frank**, 1315.
- Desjardins, C. David, Paige, Harvey L., Passmore, Jack, and Taylor, Peter.** Reaction of tetratellurium(2+) bis(hexafluoroarsenate), $\text{Te}_4(\text{AsF}_6)_2$, and hexatellurium(2+) bis(hexafluoroarsenate), $\text{Te}_6(\text{AsF}_6)_2$, with tetrafluoroethylene. The preparation of bis(perfluoroethyl) mono- and di-telluride, 488.
- Dessy, Giulia.** See **Bonamico, Mario**, 2079, 2250, 2594.
- Devine, Anthony M., Griffin, Peter A., Haszeldine, Robert N., Newlands, Michael J., and Tipping, Anthony E.** Organosilicon chemistry. Part XVII. Some reactions of 1,1,3,3-tetramethyl-1,3-disilacyclobutane. Part XVIII. Some reactions of 1,3-dimethyl-1,3-diphenyl-, 1,1,3,3-tetraphenyl-, and 1,1-dimethyl-3,3-diphenyl-1,3-disilacyclobutane, 1434, 1822.
- Devine, Anthony M., Haszeldine, Robert N., and Tipping, Anthony E.** Organosilicon chemistry. Part XIX. Reactions of 1,1,3,3-tetramethyl- and 1,3-dimethyl-1,3-diphenyl-1,3-disilacyclobutane with chlorosilanes in the presence of hexachloroplatinic(IV) acid, tin(IV) chloride, trimethylsilanol, and triphenylsilanol. Part XX. Further reactions of 1,1,3,3-tetramethyl-, 1,3-dimethyl-1,3-diphenyl-, and 1,1,3,3-tetraphenyl-1,3-disilacyclobutane, 1832, 1837.
- Dewan, John C., Edwards, Anthony J., Guerchais, Jacques E., and Petillon, François.** Fluoride crystal structures. Part XXV. Trifluorobis(4-methoxypyridine *N*-oxide)-antimony(III) hydrate, 2295.
- Dewan, John C., Edwards, Anthony J., Slim, David R., Guerchais, Jacques E., and Kergoat, René.** Fluoride crystal structures. Part XXIII. *catena*-Di- μ -fluoro-(dimethyl sulphoxide)dioxouranium(VI), 2171.
- Dewan, John C., Henrick, Kim, Kepert, David L., Trigwell, Keith R., White, Allan H., and Wild, Stanley Bruce.** Stereochemistry of seven-co-ordination: crystal structures of *rac*- and *meso*-tricarboxyldi-iodo[*o*-phenylenebis(methylphenylarsine)]molybdenum(II), 546.
- Dewan, John C., and Kepert, David L.** Stereochemistry of five-co-ordination. Part IV. Compounds of stoichiometry (bidentate ligand)[tris(unidentate ligand)]-metal, 959.
- Dewan, John C., Kepert, David L., Raston, Colin L., and White, Allan H.** Structural studies of the 1:1 addition complexes of niobium and tantalum pentachlorides with *o*-phenylenebis(dimethylarsine), 2031.
- Dewan, John C., Kepert, David L., and White, Allan H.** Crystal structure of bis-[(1,8-naphthyridine)mercury(II)] diperchlorate, 490.
- Dias, Shelton A., Downs, Allan W., and McWhinnie, William R.** Metal-ylide complexes. Part I. Metallation reactions of *N*-(1-pyridinio)benzamidate and related compounds with palladium(II), platinum(II), rhodium(III), and iridium(III), 162.
- Dickinson, Roger J., Parish, R. V. (Dick), Rowbotham, P. John, Manning, A. R., and Hackett, Paul.** Studies in Mössbauer spectroscopy. Part VII. Tin-119 and iron-57 spectra of compounds involving tin bonded to chromium, molybdenum, tungsten, manganese, iron, or cobalt, 424.
- Dillon, Keith B., Waddington, Thomas C., and Younger, David.** Some reactions of phosphine complexes of platinum(0) and palladium(0) with acidic solvents: a phosphorus-31 nuclear magnetic resonance study, 790.
- Dilworth, Jonathan R.** See **Chatt, Joseph**, 2348.
- Di Vaira, Massimo.** Crystal structures of two cobalt complexes with tetrahedrally distorted trigonal bipyramidal co-ordination and semiempirical molecular orbital study of the distortion, 1575.
- Crystal structure of the low-spin five-co-ordinate complex bromo[tris-(2-diphenylphosphinoethyl)phosphine]-cobalt(II) hexafluorophosphate, 2360.
- Di Vaira, Massimo, and Sacconi, Luigi.** Crystal and molecular structure of the low-spin five-co-ordinate complex chloro[tris-(2-diphenylphosphino-ethyl)amine]nickel(II) hexafluorophosphate, 493.
- Dixon, Keith R., Moss, Kenneth C., and Smith, Martin A. R.** Trifluoromethylthio-complexes of platinum(II): measurement of *trans*-influence by fluorine-19 nuclear magnetic resonance spectroscopy, 990.
- Dixon, Keith R.** See **Cairns, Maxwell A.**, 1159.
- Dobbie, Robert C., Gosling, Peter D., and Straughan, Brian P.** Preparation and properties of iodo(trifluoromethyl)phosphine and exchange reactions of some simple trifluoromethylphosphines, 2368.
- Dobbie, Robert C., Wan, Emma, and Onak, Thomas.** Hydrolysis and methanolysis of the small *closo*-carboranes 1,5-dicarbapentaborane, 1,6-dicarbahexaborane, and 2,4-dicarbahexaborane. The preparation of 1,3,5-triborapentane derivatives, $(\text{RO})_2\text{BCH}_2\text{B}(\text{OR})\text{CH}_2\text{B}(\text{OR})_2$ ($\text{R} = \text{Me}$ or H), 2603.
- Dobson, Alan, Robinson, Stephen D., and Uttley, Michael F.** Complexes of the platinum metals. Part V. Perfluorocarboxylato-derivatives, 370.
- Dollimore, L. S., and Gillard, R. D.** Optically active co-ordination compounds. Part XXXVII. Chiroptical properties of the ethylenediaminebis(1,10-phenanthroline)cobalt(III) ion, 369.
- Domiano, Paolo, Musatti, Amos, Nardelli, Mario, and Pelizzi, Corrado.** Crystal structure and chemical properties of bis(*N*-picolinylidene-*N'*-salicyloylhydrazinato)nickel(II), 295.
- Domiano, Paolo, Musatti, Amos, Nardelli, Mario, Pelizzi, Corrado, and Predieri, Giovanni.** Crystal and molecular structure of *catena*- μ -isothiocyanato-(*N'*-pyridylmethylene-*N''*-salicyloylhydrazinato-*NN'*O)copper(II), 2357.
- Domiano, Paolo, Musatti, Amos, Nardelli, Mario, and Predieri, Giovanni.** Crystal and molecular structure of *cis*-dichlorobis[methylamino(methoxy)carbene]palladium(II), 2165.
- Domingos, Antonio J. P., Johnson, Brian F. G., and Lewis, Jack.** Reactivity of co-ordinated ligands. Part XXVI. Some substitution reactions of tricarbonyl(η -cyclo-octa-1,5-diene)ruthenium, 2288.
- Donaldson, John D., Ross, Sidney D., Silver, Jack, and**

E

- Watkiss, Philip J.** Solid-state effects and the vibrational spectra of hexahalogenastannates(IV) and -tellurates (IV), 1980.
- Donaldson, John D., Silver, Jack, and (in part) Hadjiminolis, Savvas, and Ross, Sidney D.** Effects of the presence of valence-shell non-bonding electron pairs on the properties and structures of caesium tin(II) bromides and of related antimony and tellurium compounds, 1500.
- Donaldson, John D.** See **Davies, Colin G.**, 2241.
- Donovan, William F., and Smith, Peter W.** Crystal and molecular structures of aquahalogenovanadium(III) complexes. Part I. X-Ray crystal structure of *trans*-tetrakis-aquadibromovanadium(III) bromide dihydrate and the isomorphous chloro-compound, 894.
- Dori, Zvi.** See **Spivack, Bruce**, 1077.
- Down, Michael G., Hubberstey, Peter, and Pulham, Richard J.** Sodium-lithium phase diagram: redetermination of the liquid immiscibility system by resistance measurement, 1490.
- Downs, Allan W.** See **Dias, Shelton A.**, 162.
- Dreos, Renata, Tauzher, Gianni, Costa, Giacomo, and Green, Michael.** Kinetics and mechanism of oxidation of diaqua[2,2-difluoro-5,6,12,13-tetramethyl-1,3-dioxo-4,7,11,14-tetra-aza-2-boracyclotetradeca-4,6,11,13-tetra-ene(1-)-NN'NN']cobalt(II) perchlorate, 2329.
- Drew, Michael G. B., Othman, A. Hamid Bin, McIlroy, Paul D. A., and Nelson, S. Martin.** Seven co-ordination in metal complexes of quinque-dentate macrocyclic ligands. Part II. Synthesis, properties, and crystal and molecular structures of some iron(III) derivatives of two 'N₅' macrocycles, 2507.
- Drew, Michael G. B., Rice, David A., and Timewell, Christopher W.** Crystal and molecular structure of triaquazinc(II) thioglycolate monohydrate, 144.
- Drew, Michael G. B., and Wilkins, John D.** Crystal and molecular structure of tri-μ-chloro-bis[dicarbonylbis(trimethyl phosphite) molybdenum] tetrachloro(dimethyl phosphito)oxomolybdate, 1984.
- Crystal and molecular structure of two seven-co-ordinate distorted pentagonal bipyramidal complexes of tantalum(V), 2611.
- Drew, Michael G. B.** See **Armour, Alan W.**, 1493, **Arthurs, Michael**, 1794, and **Cook, John A.**, 1973.
- Druskovich, David M., and Kepert, David L.** Base decomposition of decavanadate, 947.
- DuBois, Daniel L., Myers, William H., and Meek, Devon W.** Synthesis of polytertiary phosphines and 'mixed' phosphorus-sulphur and 'mixed' phosphorus-nitrogen polydentate ligands *via* free-radical catalysis, 1011.
- Duchêne, Michael.** See **Buttenshaw, A. Juliet**, 2230.
- Dunham, N. Ann, and Baird, Michael C.** Stereochemistry of formation and reactions of carbonyldichloro-(*threo*-α,β-dideuteriophenethyl)bis(triphenylphosphine)-rhodium and -iridium complexes, 774.
- Dunmur, Richard E.** See **Harris, Robin K.**, 61.
- Du Preez, Jan G. H., and Van Vuuren, Cornelius P. J.** The chemistry of uranium. Part XII. Nitrate complexes of uranium(IV) and thorium(IV), 1548.
- Du Preez, Jan G. H.** See **Bagnall, Kenneth W.**, 140, 1963.
- Dutta-Chaudhuri, Subrata, O'Connor, Charmian J., and Odell, Allan L.** Reactivity of co-ordinated amino-acids. Part I. Oxygen-18 exchange studies on the *trans*(*fac*)-bis(*N*-methyliminodiacetato)chromate(III) anion and *N*-methyliminodiacetic acid, 1921.
- Dyson, John.** See **Searle, Harold T.**, 203.
- Eaborn, Colin, Metham, Timothy N., and Pidcock, Alan.** Preparation of silylplatinum complexes by interaction of organosilicon hydrides and carbonatobis(phosphine)-platinum(II) complexes, 2212.
- Eaborn, Colin, Pidcock, Alan, and Steele, Barry R.** The reaction between carbonatobis(phosphine)platinum(II) complexes and triorganotin hydrides. Formation of Sn-Pt^{IV} bonds, 809.
- Eaborn, Colin.** See **Courtis, Barbara**, 2460, and **Dent, Stephen P.**, 2646.
- Eady, Colin R., Johnson, Brian F. G., and Lewis, Jack.** The chemistry of polynuclear compounds. Part XXVI. Products of the pyrolysis of dodecacarbonyl-triangulo-triruthenium and -triosmium, 2606.
- Ebsworth, E. A. V.** See **Cradock, Stephen**, 25, 390, 805, 1624.
- Eckberg, Richard P., and Hatfield, William E.** A study of the magnetic properties of copper(II) pyrazinamide complexes, 616.
- Magnetic properties of polymeric dihalogenodi(nicotinamide)- and dihalogenodi(isonicotinamide)-copper(II) complexes, 1364.
- Eckberg, Richard P., Losee, D. Bruce, and Hatfield, William E.** Magnetism of the dinitrogen tetraoxide adduct of copper(II) nitrate, 633.
- Edeogu, Stella.** See **Adegite, Adeleye**, 1203.
- Edwards, Anthony J., and Taylor, Peter.** Fluoride crystal structures. Part XXIV. Tetrafluoroiodine(V) μ-fluorobis[pentafluoroantimonate(V)], 2174.
- Edwards, Anthony J.** See **Dewan, John C.**, 2171, 2295.
- Edwards, Dennis A., and Richards, Roger.** Complexes of copper(I) acetate. Part I. Complexes with σ-donor ligands, 637.
- Edwards, John.** See **Bagnall, Kenneth W.**, 140.
- Edwards, Julian D.** See **Foong, Siew-Wan**, 277.
- Einstein, Frederik W. B., and Field, John S.** Novel cleavage product of the reaction of a ditertiary arsine with decacarbonyldimanganese: crystal structure of μ-(dimethylarsino)-μ-[1-3-η-[2,3-bis(dimethylarsino)-1,1-difluoro-3-trifluoromethylallyl]-(As,As',C,C',C'')]-bis[tricarboxylmanganese(I)], 172.
- Stereochemistry of seven-co-ordinate complexes containing a tin-molybdenum bond: crystal structure of [1,2-bis(diphenylphosphino)ethane]tetracarbonyl(trichlorostannyl)molybdenum(I) aquapentachlorostannate-benzene, 1628.
- Elder, Peter A., Robinson, Brian H., and Simpson, Jim.** Chemistry of the tricobalt carbon cluster. Part XI. Bicyclo[2.2.1]hepta-2,5-diene, cyclohexa-1,3-diene, and cyclopentadienyl derivatives, 1771.
- Ellis, Keith J., Lappin, A. Graham, and McAuley, Alexander.** Metal-ion oxidations in solution. Part XV. Rate-determining dimerisations in redox reactions of iron(III) with some α-mercaptocarboxylic acids, 1930.
- Elson, Clive M.** On the charge distribution in complexes: an electrochemical study, 2401.
- Elson, Clive M.** See **Chatt, Joseph**, 2392.
- Empsall, H. David, Hyde, Eileen M., and Shaw, Bernard L.** Some unusual iridium(I), -(II), and -(III) complexes formed from 2-methoxyphenyl- or 2-hydroxyphenyl-di-*t*-butylphosphine, 1690.
- Emsley, James W.** See **Beattie, Ian R.**, 1264.
- Emsley, John.** See **Clark, James H.**, 2129.

- Englehardt, Lutz M.** See **Baker, Joe**, 530.
- English, Robin B., Haines, Raymond J., and Nolte, Christian R.** Reactions of metal carbonyl derivatives. Part XVIII. Synthesis and redox properties of some binuclear derivatives of iron bridged by both carbonyl and alkylthio-groups, 1030.
- Ernstbrunner, Edgar E., and Kilner, Melvyn.** Spectroscopic studies of metal carbonyl complexes. Part I. Theoretical considerations and application to mercury bis(tetracarbonylcobaltate), 2598.
- Estes, Eva Dixon, and Hodgson, Derek J.** Molecular crystal structure of dichloro(*NNN'*-tetraethylethylenediamine)copper(II), 1168.
- Evans, Dennis F., and Turner, G. Kevin.** Spectroscopic studies of inorganic fluoro-complexes. Part IV. Fluorine-19 nuclear magnetic resonance studies of platinum-(IV) fluoro-complexes, 1238.
- Evans, Howard T. (jun.), Gatehouse, Bryan M., and Leverett, Peter.** Crystal structure of the heptamolybdate(VI) (paramolybdate) ion, $[\text{Mo}_7\text{O}_{24}]^{6-}$, in the ammonium and potassium tetrahydrate salts, 505.
- Ewings, Paul F. R., and Harrison, Philip G.** Derivatives of bivalent germanium, tin, and lead. Part VIII. Tin(II) aryl-carboxylates, -sulphonates, and halide methoxides, 1717.
- Derivatives of bivalent germanium, tin, and lead. Part X. Tin(II) bis(phenoxides), bis(*O*-methyl dithiocarbonate), and bis(diethyldithiocarbamate), 2015.
- Ewings, Paul F. R., Harrison, Philip G., and Fenton, David E.** Derivatives of bivalent germanium, tin, and lead. Part V. Bis(pentane-2,4-dionato)-, bis(1,1,1-trifluoropentane-2,4-dionato)-, and bis(1,1,1,5,5,5-hexafluoropentane-2,4-dionato)-tin(II), 821.
- Ewings, Paul F. R., Harrison, Philip G., and King, Trevor J.** Derivatives of bivalent germanium, tin, and lead. Part VI. Crystal and molecular structure of bis(1-phenylbutane-1,3-dionato)tin(II), 1455.
- Ewings, Paul F. R., Harrison, Phillip G., King, Trevor J., Phillips, Robin C., and Richards, John A.** Structural studies in main-group chemistry. Part X. Crystal and molecular structure of *catena*-(cyclohexanone oximate)trimethyltin, 1950.
- F**
- Fabbrizzi, Luigi.** See **Bianchini, Claudio**, 1036.
- Fair, Malcolm J.** See **Gregson, Anthony K.**, 1306.
- Falcinella, Bruno, Felgate, Peter D., and Laurence, Gerald S.** Aqueous chemistry of thallium(II). Part II. Kinetics of reaction of thallium(II) with manganese(II), iron(II), and cobalt(III) ions, 1.
- Falconer, Warren E.** See **Vasile, Michael J.**, 316.
- Fallon, Gary D., and Gatehouse, Bryan M.** Crystal and molecular structure of an octahedral iron(III) complex with a sulphur-containing Schiff-base ligand: bis(2-aminoethylthiosalicylideneiminato)iron(III) chloride, 1344.
- Faraone, Felice.** Diphenyl dithiophosphato- and dicyclohexyldithiophosphinato-complexes of rhodium(I), 541.
- Fares, Vincenzo.** See **Bonamico, Mario**, 2079, 2250, 2594.
- Farrar, Jeffrey, Holland, David, and Milner, David J.** Liquid-phase metal-centred autoxidation of styrene catalysed by rhodium species, 815.
- Faulds, Gavin R.** See **Lindsell, W. Edward**, 40.
- Favero, Giancarlo.** See **Corain, Benedetto**, 283.
- Fazakerley, G. Victor.** See **Casper, Anne**, 1977.
- Felgate, Peter D.** See **Falcinella, Bruno**, 1.
- Fendler, Janos H.** See **Hinze, Willie**, 238.
- Fenton, David E.** See **Ewings, Paul F. R.**, 821.
- Ferguson, George, Goel, Ram G., and Ridley, Donald R.** Stereochemistry of some organic derivatives of Group Vb elements. Part V. Crystal and molecular structure of bis(isocyanato)triphenylantimony, 1288.
- Ferguson, George, and Rendle, David F.** Stereochemistry of some organic derivatives of Group Vb elements. Part IV. Crystal and molecular structure of 1-acetyl-2,3,4-triphenyl-5-(triphenylarsonio)cyclopentadienide, 1284.
- Ferguson, George.** See **Alyea, Elmer C.**, 1294, **Balahura, Robert J.**, 603, and **March, Frank C.**, 1291, 1377, 1381.
- Ferradini, Christiane.** See **Gardès-Albert, Monique**, 2075.
- Fey, George T.** See **Alyea, Elmer C.**, 1294.
- Field, John S.** See **Einstein, Frederik W. B.**, 172, 1628.
- Fields, Roy, Godwin, Graham L., and Haszeldine, Robert N.** Metal carbonyl chemistry. Part XXVI. Preparation, spectroscopic properties, and model of decomposition of some halogenoethylene complexes of tetracarbonyliron, and the reaction of nonacarbonyliron with iodotrifluoroethylene, 1867.
- Figgis, Brian N.** See **Baker, Joe**, 530, 598.
- Filipcuk, Stephen W., Hayes, John W., Radford, Donald V., Das, Manoranjan, and Livingstone, Stanley E.** Dipole-moment measurements on metal chelate complexes. Part III. Dipole-moment and dielectric-relaxation measurements on some tetrahedral zinc(II) complexes of seven mercapto- β -diketones, 886.
- Finch, Arthur, Gardner, Peter J., Gates, Peter N., Hameed, Abdul, McDermott, Connor P., SenGupta, Kalyan K., and Stephens, Michael.** Solution thermochemistry of phosphorus(V) bromide and tetrachlorophosphonium tetrachloroborate and tetrabromoborate, 967.
- Finch, Arthur, Gardner, Peter J., Hill, Norman, and (in part) Roberts, Nigel.** Synthesis and thermodynamic functions of rubidium and caesium tetrachloroborates, 357.
- Fitzsimmons, Brian W., Al-Mukhtar, Saad E., Larkworthy, Leslie F., and Patel, Ramesh R.** Magnetic and Mössbauer investigations of *NN*-disubstituted bis(dithiocarbamate)iron(II) complexes, 1969.
- Flamini, Alberto.** See **Bossa, Mario**, 596.
- Foà, Marco, and Cossar, Luigi.** Oxidative addition of aryl halides to tris(triphenylphosphine)nickel(0), 2572.
- Fong, Clifford W., and Wilkinson, Geoffrey.** Syntheses of carbon monoxide, cyclopentadienyl and related compounds of transition metals containing the η^1 - or η^2 -dimethylaminomethyl ligand, 1100.
- Foong, Siew-Wan, Edwards, Julian D., Taylor, Roger S., and Sykes, A. Geoffrey.** The uncatalysed and mercury(II)- and thallium(III)-catalysed elimination of chloride from the μ -amido- μ -chlorobis[tetra-amminecobalt(III)] complex, 277.
- Ford, James.** See **Chipperfield, John R.**, 2042.
- Forsellini, Eleanora.** See **Baracco, Livio**, 2161.
- Fouda, Safaa A.** See **Byerley, John J.**, 1329.
- Fowles, Gerald W. A.** See **Britnell, David**, 28, 213.
- Fraser, George W., and Meikle, Gordon D.** Reaction of tellurium hexafluoride with ethylene glycol and other polyhydric alcohols, 1033.
- Fraser, Louis R.** See **Andrew, John E.**, 800, and **Blake, Antony B.**, 193.

- Frazer, Malcolm J., and Haines, L. Ian B. Kinetics of the hydrolysis of some dihalogenotin(IV) β -diketonates, 1471.
- Freeman, Alan G. See Johnston, James H., 2153.
- Freer, Andrew A. See Barrow, Michael J., 197.
- Freyberg, Derek P. See Healy, Peter C., 691.
- Friedt, Jean M. See Asch, Lilane, 1235.
- Fritchie, Chantes J. (jun.). See Yu, Mei Wang, 377.
- Frlec, Boris, and Holloway, John H. The $\text{XeF}_2\text{-MF}_3$ ($\text{M} = \text{Sb, Ta, or Nb}$) systems: vibrational spectra of solid xenon difluoride adducts, 535.
- Fuger, Jean, and Brown, David. Thermodynamics of the actinoid elements. Part V. Enthalpies and Gibbs energies of formation of some protactinium(IV) and (V) halides, 2256.
- Fullam, Brian W., and Symons, Martyn C. R. Radiation mechanisms. Part II. Electron spin resonance studies of the mechanism of radiation processes in trivalent phosphorus derivatives, 861.
- Fullam, Brian W. See Claxton, Thomas A., 1395.

G

- Gainsford, Graeme J. See Conway, Anthony J., 2499.
- Galizzioli, Dario. See Cariat, Franco, 556.
- Gallagher, Kevin J., and Ottaway, Martyn R. Mixed-valent iron fluoride hydrates and their thermal-decomposition products, 978.
- Game, Colin H., Green, Michael, and Stone, F. Gordon A. Chemistry of the metal carbonyls. Part LXXII. Carbene complexes of manganese containing thiazolidinylidene and benzothiazolidinylidene ligands, 2280.
- Gancedo, J. Ramon. See Clark, Michael G., 120.
- Gans, Peter. See Christopher, Roger E., 153.
- Gardès-Albert, Monique, Ferradini, Christiane, and Puchault, Jacques. Kinetics of decomposition of hyperoxovanadium(IV) ions in the presence of vanadium(IV), 2075.
- Gardner, Michael. See Booth, Brian L., 1856, 1863.
- Gardner, Peter J., Cartner, Anthony, Cunningham, Robert G., and Robinson, Brian H. Bond energies in dicobalt octacarbonyl and bromo- and chloro-methylidyne-tricobalt enneacarbonyls, 2582.
- Gardner, Peter J. See Finch, Arthur, 357, 967.
- Gardner, W. E. See Gregson, Anthony K., 1306.
- Gargano, Michele, Giannoccaro, Potenzo, Rossi, Michele, Vasapollo, Giuseppe, and Sacco, Adriano. Paramagnetic hydrido-complexes of iron(II) and iron(III), 9.
- Garner, C. David, Hillier, Ian H., and Guest, Martyn F. *Ab initio* self-consistent field molecular-orbital calculation of the ground state of tetranitratotitanium(IV); comments on the reactivity of anhydrous metal nitrates, 1934.
- Garner, C. David, Hughes, Barry, and King, Trevor J. Inorganic compounds containing the trifluoroacetate group. Part III. Reactions of bis(trifluoroacetato)divinyltin with *N*-, *O*-, or *N*- and *O*-donor ligands, and the crystal structure of (2,2'-bipyridyl)bis(trifluoroacetato)divinyltin, 562.
- Garner, C. David, Hyde, Michael R., Mabbs, Frank E., and Routledge, Vincent I. Kinetics and mechanism of halide-substitution reactions of trichloro-oxobis(triphenylphosphine oxide)-molybdenum(V), 1175.
- Kinetics and mechanism of oxidation of trichloro-oxobis(triphenylphosphine oxide)-molybdenum(V) by nitrate in dichloromethane, 1180.
- Garner, C. David, and Senior, Roger G. Inorganic compounds containing the trifluoroacetate group. Part V. Mono- and di-adducts of binuclear molybdenum(II) trifluoroacetates, 1171.
- Garner, C. David. See Boorman, P. Michael, 1299, Hyde, Michael R., 1186, and McFadden, Dennis L., 263.
- Gasparrini, Francesco. See Maresca, Luciana, 1601.
- Gatehouse, Bryan M. See Evans, Howard T. (jun.), 505, and Fallon, Gary D., 1344.
- Gates, Peter N. See Finch, Arthur, 967.
- Gelbman, Peter, and Westland, Alan D. Enthalpies of formation of alkali-metal hexachloro-zirconates and -hafnates, 1598.
- Gellatly, Barry J. See Bagnall, Kenneth W., 1963.
- Gerloch, Malcolm, and McMeeking, Robert F. Paramagnetic properties of unsymmetrical transition-metal complexes, 2443.
- Gerloch, Malcolm, McMeeking, Robert F., and White, Anthony M. Paramagnetic ellipsoids and π bonding in dithiocyanatotetrapyridine-cobalt(II) and -iron(II), 2452.
- German, Alun. See Beattie, Ian R., 1659.
- Giannoccaro, Potenzo. See Gargano, Michele, 9.
- Gibbins, Sidney G., Lappert, Michael F., Pedley, J. Brian, and Sharp, Graham J. Bonding studies of transition-metal complexes. Part II. Helium-I photoelectron spectra of homoleptic d^0 , d^1 , and d^{10} tetrakis(dialkylamides) of transition and Group 4B metals and tungsten hexakis(dimethylamide), 72.
- Gibson, James Andrew, Rösenthaller, Gerd-Volker, and Schmutzler, Reinhard. Fluorophosphoranes containing the perfluoropinacolyl ring system. Part II. Synthesis and nuclear magnetic resonance studies, 819.
- Gibson, John F., Mertis, Konstantinos, and Wilkinson, Geoffrey. Chemistry of rhenium alkyls. Part II. Electron spin resonance and electronic absorption spectra of tetramethyloxo- and oxotetrakis(trimethylsilylmethyl)-rhenium(VI), 1093.
- Gidney, Peter M. See Hay, Robert W., 779.
- Gillard, R. D., Harrison, Kay, and Mather, I. H. 1,10-Phenanthroline complexes of rhodium(I), 133.
- Gillard, R. D. See Dollimore, L. S., 369.
- Ginns, Ian S., and Symons, Martyn C. R. Radiation mechanisms. Part I. Inorganic salts in aqueous solutions: electron spin resonance studies of γ -irradiated aqueous glasses containing oxyanions, 514.
- Giraudi, Gianfranco. See Pelizzetti, Ezio, 794.
- Giusto, Domenico. See Ciani, Gianfranco, 2156.
- Glasberg, Brian R. See Ladd, John A., 2378.
- Glavas, Mira, and Reynolds, Warren L. Aqueous solution of penta-ammine(dimethyl sulphoxide)cobalt(III) perchlorate in ethanol-water-perchlorate media, 1706.
- Glockling, Frank, and Pollock, R. J. Ivan. Formation of platinum-silicon, -germanium, and -tin complexes by cleavage of platinum-carbon bonds and by oxidative addition of trimethylstannane to platinum complexes, 497.
- Goddard, Richard. See Bottrill, Martin, 1150.
- Goddard, Vivian W., and Pett, Clive. Kinetic investigation of the reaction between tungsten and bromine, 767.
- Godwin, Graham L. See Fields, Roy, 1867.
- Goel, Ram G., Ruddick, John N. R., and Sams, John R. Antimony-121 Mössbauer spectroscopic study of bis(halogenoacetato)trimethylantimony derivatives, 67.
- Goel, Ram G. See Alyea, Elmer C., 1294, and Ferguson, George, 1288.

- Goldwhite, Harold, Gysegem, Peter, Schow, Steven, and Swyke, Christopher.** Phosphorimidates and related compounds, 12.
- Structure and decomposition of a Staudinger reaction intermediate [1-methyl-(or phenyl)-3-tris(dimethylamino)phosphoranylidene triazene], 16.
- Goodall, Brian L.** See **Bruce, Michael I.**, 591, 1651.
- Gosling, Peter D.** See **Dobbie, Robert C.**, 2368.
- Graham, Bruce W. L., Mackay, Kenneth M., and Stobart, Stephen R.** Transition-metal carbonyl derivatives of the germanes. Part V. Chemistry of pentacarbonyl-manganese derivatives of germane and methylgermane, 475.
- Graziani, Rodolfo.** See **Baracco, Livio**, 2161, and **Bombieri, Gabriella**, 1873.
- Greaney, Terence M., Raston, Colin L., White, Allan H., and Maslen, Edward N.** Crystal structure of potassium tris(acetylacetonato)cadmate(II) monohydrate, 876.
- Greaney, Terence M.** See **Maslen, Edward N.**, 400.
- Green, Jennifer C., Jackson, Sally E., and Higginson, Brian.** Photoelectron studies of some bent bis(η -cyclopentadienyl)metal complexes. Part I. Some eighteen-electron systems with hydride, alkyl, olefin, allyl, and carbonyl ligands, 403.
- Green, Malcolm L. H.** See **Anthony, Martin T.**, 1419, and **Akhmedov, Vagif M.**, 1412.
- Green, Michael, Howard, Judith A. K., Hughes, Russell P., Kellett, Susan C., and Woodward, Peter.** η^2 -Bonded methylenecyclopropane complexes of rhodium(I), iridium(I), platinum(0), and platinum(II): crystal and molecular structure of acetylacetonatobis(η^2 -methylenecyclopropane)rhodium(I), 2007.
- Green, Michael, Howard, Judith A. K., Spencer, John L., and Stone, F. Gordon A.** Metallaborane chemistry. Part V. Reactions of zerovalent nickel and platinum complexes with *arachno*-5,9- C_2B , carbaboranes; crystal and molecular structure of a carbadibora-allyl nickel complex, 2274.
- Green, Michael, and Lewis, Brian.** Reactions of co-ordinated ligands. Part VIII. The addition of hexafluoroacetone to tricarbonyl(diene)iron and η -cyclopentadienyl(diene)rhodium complexes, 1137.
- Green, Michael, Lewis, Brian, Daly, John J., and Sanz, Francisco.** Reactions of co-ordinated ligands. Part VI. The addition of hexafluoropropene, trifluoroethylene, and chlorotrifluoroethylene to tricarbonyl(diene)iron or ruthenium complexes and to tricarbonyl(*o*-styryldiphenylphosphine)iron, 1118.
- Green, Michael, Spencer, John L., Stone, F. Gordon A., and Welch, Alan J.** Metallaborane chemistry. Part I. Oxidative-insertion reactions of dicarbaundecaborane and metalladicarbaundecaborane species with zerovalent nickel, palladium, and platinum complexes, 179.
- Green, Michael, Stone, F. Gordon A., and Underhill, Mark.** Chemistry of the metal carbonyls. Part LXXI. Carbene(tetracarbonyl)-iron and -osmium complexes containing thiazolidinylidene and related ligands, 939.
- Green, Michael, and Taylor, Susan H.** Reactions of co-ordinated ligands. Part VII. Tetrafluoroethylene with π -allyliridium(I) complexes. Part IX. Insertion reactions of π -allylic iridium(I) complexes with hexafluorobut-2-yne, 1128, 1142.
- Green, Michael.** See **Bond, Alan**, 1109, **Bottrill, Martin**, 1150, **Carroll, W. Eamon**, 2263, **Dreos, Renata**, 2329, and **Game, Colin H.**, 2280.
- Greenhalgh, Douglas A.** See **Clegg, William**, 2591.
- Greenwood, Norman N., Thomas, Brian S., and Waite, David W.** Dimethylindium(III), dimethylthallium(III), and methylmercury(II) derivatives of the dodecahydrido-decaborate(2-) ion, 299.
- Greenwood, Norman N., and Youll, Bart.** Reactions of some tin(II) and tin(IV) compounds with the dodecahydrido-decaborate(2-) ion, $[B_{10}H_{12}]^{2-}$, 158.
- Greenwood, Norman N.** See **Takeda, Masuo**, 2207.
- Gregson, Anthony K., Day, Peter, Leech, David H., Fair, Malcolm J., and Gardner, W. E.** Magnetic susceptibility and magnetization of the ionic ferromagnets dipotassium, dirubidium, and dicaesium tetrachlorochromate(II), 1306.
- Griffin, Gerald F.** See **Brisdon, Brian J.**, 1999.
- Griffin, Peter A.** See **Devine, Anthony M.**, 1434, 1822.
- Griffiths, Trevor R., and Potts, Philip J.** A new computer-based method for determining ΔH from digitized spectra: the nickel(II) + chloride system in dimethyl sulphoxide, 344.
- Griffith, William P.** See **Kiernan, Patrick M.**, 2489, and **Pawson, David**, 417.
- Guerchais, Jacques E.** See **Dewan, John C.**, 2171, 2295.
- Guest, Martyn F.** See **Garner, C. David**, 1934.
- Guha, Sankarananda.** See **Saha, Chitta Ranjan**, 1701.
- Gunz, Hugh P.** See **Butcher, Raymond, J.**, 1223.
- Gupta, Yugul Kishore.** See **Mohan, Devendra**, 1737, **Sharma, Prem Dutt**, 81, and **Thakuria, Brij M.**, 77, 2541.
- Gysegem, Peter.** See **Goldwhite, Harold**, 12, 16.

H

- Habeeb, Jacob J., and Tuck, Dennis G.** Co-ordination compounds of indium. Part XXVIII. Preparation and oxidation of indium(I) derivatives of bidentate organic bases, 1815.
- Hackbusch, Wolfgang, Rupp, Herbert H., and Wiegardt, Karl.** Cobalt-59 nuclear magnetic resonance study of some polynuclear cobalt(III) complexes, 1015.
- Cobalt-59 nuclear magnetic resonance study of μ -carboxylato-di- μ -hydroxo-bis[triamminecobalt(III)] complexes, 2364.
- Hackett, Paul, and Manning, A. R.** Preparation, structure, and reactions of some new complexes containing copper or silver bonded to various transition metals, 1606.
- Hackett, Paul.** See **Dickinson, Roger J.**, 424.
- Hadjiminolis, Savvas.** See **Donaldson, John D.**, 1500.
- Haines, L. Ian B.** See **Frazer, Malcolm J.**, 1471.
- Haines, Raymond J.** See **English, Robin B.**, 1030.
- Haines, Robert I.** See **Burgess, John**, 2579.
- Hameed, Abdul.** See **Finch, Arthur**, 967.
- Hamner, E. Roger.** See **Burgess, John**, 2579.
- Harland, Lesley.** See **Burrows, Edward L.**, 2353.
- Harris, David H., Lappert, Michael F., Poland, John S., and McFarlane, William.** Binuclear organometallic compounds. Part IX. Nuclear magnetic double resonance studies of tin-119 chemical shifts in compounds with transition metal-to-tin bonds, 311.
- Harris, Robin K., Lewellyn, Mark, Wazeer, Mohamed I. M., Woplin, John R., Dunmur, Richard E., Hewson, Michael J. C., and Schmutzler, Reinhard.** Preparative and nuclear magnetic resonance studies of diazadiphosphetides. Part V. Chloromethyl compounds of the type $[(Cl_2H_3-xC)F_2PNMe]_2$, 61.

- Harris, Robin K.** See **Clare, Philip**, 625.
- Harrison, Brian, Logan, Norman, and Raynor, J. Barrie.** An electron spin resonance study of the bonding in potassium hexanitratotridate(IV), 1384.
- Harrison, Kay.** See **Gillard, R. D.**, 133.
- Harrison, Philip G., King, Trevor J., and Richards, John A.** Structural studies in main group chemistry. Part VIII. The crystal and molecular structure of bis(*N*-methyl-*N*-acetylhydroxylamino)dimethyltin(IV), 826.
- Derivatives of bivalent germanium, tin, and lead. Part XII. Crystal and molecular structure of di- μ -bis(cyclopentadienyl)stannyl-bis(tetracarbonyliron), 2097.
- Harrison, Philip W.** See **Addison, Clifford C.**, 830, **Buckle, John**, 1552, **Cornwell, Anthony B.**, 1486, 1722, 2017, and **Ewings, Paul F. R.**, 821, 1455, 1717, 1950, 2015.
- Harrison, William.** See **Barrow, Michael J.**, 197.
- Hart, F. Alan.** See **Catton, Graham A.**, 221.
- Hartley, Frank R.** See **Alcock, Roland M.**, 2189, 2194.
- Hartman, J. Stephen, and Timms, Peter L.** Lewis acidity of dodecafluoro-octaborane(12) and trifluorophosphine-tris(difluoroboryl)borane (1/1): a nuclear magnetic resonance study of reactions with trimethylamine, 1393.
- Hasso, Sundus.** See **Deeming, Antony J.**, 1614.
- Haszeldine, Robert N., Pool, Colin R., and Tipping, Anthony E.** Polyfluoroalkyl derivatives of silicon. Part XIII. Preparation and pyrolysis of trifluoro(halogenovinyl)silanes and (1-fluoro-2-halogenoethyl)trihalogenosilanes. Part XIV. Reaction of trichlorosilane with 1,3,3,3-tetrafluoro-propene and 2-chloro-1,3,3,3-tetrafluoro-propene, 2177, 2292.
- Haszeldine, Robert N., Rogers, David J., and Tipping, Anthony E.** Nitroxide chemistry. Part IX. Reaction of *NN*-bis(trifluoromethylamino)-oxyl with tetramethylsilane, chloromethylsilanes, and methoxymethylsilanes, 2225.
- Haszeldine, Robert N., Tipping, Anthony E., and Watts, Richard O'B.** Organosilicon chemistry. Part XV. Thermal reactions of trifluoro(1,1,2,2-tetrafluoroethyl)silane and silicon tetrafluoride with methoxotrimethylsilane, hexamethyldisilazane, and trimethylsilanol, 1431.
- Haszeldine, Robert N.** See **Betts, Christopher E.**, 2215, 2218, **Bevan, William I.**, 252, 620, **Booth, Brian L.**, 1439, 1446, 1449, 1843, 1847, 1850, 1856, 1863, **Devine, Anthony M.**, 1434, 1822, 1832, 1837, and **Fields, Roy**, 1867.
- Hatfield, William E.** See **Eckberg, Richard P.**, 616, 633, 1364.
- Hauswirth, Wolfgang.** See **Schmidt, Karlheinz**, 2199.
- Hay, Robert W., Gidney, Peter M., and Lawrence, Geoffrey A.** Cobalt(II) complexes of 3,7-dithianonane-1,9-diamine, 779.
- Hay, Robert W., and Lawrence, Geoffrey A.** Transition-metal complexes of the macrocyclic ligand 5,12-dimethyl-1,4,8,11-tetra-azacyclotetradeca-4,11-diene, 1466.
- Kinetics of aequation and base hydrolysis of the macrocyclic complex *trans*-chloro(5,12-dimethyl-1,4,8,11-tetra-azacyclotetradeca-4,11-diene)nitrocobalt(III) perchlorate, 1556.
- Hay, Robert W., and Nolan, Kevin B.** Reactions of co-ordinated ligands. Hydrolysis of tetramethyl ethylenediaminetetra-acetate and its copper(II) complexes, 1348.
- Base hydrolysis and mercury(II)-catalysed aequation of bis(ethylenediamine-*NN'*)(ethylenediamine-*N'*)halogenocobalt(II) complexes, 1621.
- Hayes, John W.** See **Filipcuk, Stephen W.**, 886.
- Hayter, Andy C.** See **Chipperfield, John R.**, 2048, 2051.
- Head, Robert A., Nixon, John F., Sharp, Graham J., and Clark, Ronald J.** Photoelectron spectroscopic study of metal trifluorophosphine and hydridotrifluorophosphine complexes, 2054.
- Healy, Peter C., Mockler, Garry M., Freyberg, Derek P., and Sinn, Ekk.** Structures and properties of the copper(II) and nickel(II) complexes of *NN'*-bis[(2-hydroxy-5-methylphenyl)-phenylmethylene]-4-azaheptane-1,7-diamine and related compounds: direct comparison of *d*⁸ and *d*⁹ analogues, 691.
- Healy, Michael A.** See **Chew, K. Frank**, 1315.
- Heidtmann, Patricia.** See **Sweigart, Dwight A.**, 1686.
- Heil, Balint.** See **Johnson, Brian F. G.**, 567.
- Heitsch, Charles W.** See **Wulfman, David S.**, 522.
- Helbert, John N., Kopf, Peter W., Poindexter, Edward H., and Wagner, Burkhard E.** Complexing and protonation of free-radical imidazolin-1-oxyl and imidazolin-1-oxyl 3-oxide ligands: a magnetic-resonance investigation, 998.
- Henderson, Eric.** See **Borrell, Peter**, 432.
- Henrick, Kim, and Wild, Stanley Bruce.** Synthesis, separation into diastereoisomers, and resolution of *o*-phenylenebis(methylphenylarsine) and related studies of the *o*-phenylenediarsine moiety, 1506.
- Henrick, Kim.** See **Dewan, John C.**, 546.
- Hendrickson, Alan R., Martin, Raymond L., and Taylor, Donald.** Synthesis and properties of dimeric cobalt(III) dithiocarbamate complexes [Co₂(R₂dtc)₂]⁺: X-ray structural analysis of pentakis(diethyldithiocarbamate)dico-balt(III) tetrafluoroborate, 2182.
- Hensens, Otto D.** See **Cockle, Stephen A.**, 2633.
- Herberich, G. E., Lund, Trevor, and Raynor, J. Barrie.** Electron spin resonance of bis(1-phenylborabenzene)-cobalt(II), 985.
- Herring, F. Geoffrey, Patmore, David J., and Storr, Alan.** Spectroscopic studies on pyrazolyl-gallate and -borate complexes of copper(II) and nickel(II), 711.
- Hewlins, Michael J. E.** Crystal structure of [NN'-tetramethylenebis(thioacetylacetoneiminato)(2-)]zinc, 429.
- Hewson, Michael J. C.** See **Harris, Robin K.**, 61.
- Higginson, Brian.** See **Green, Jennifer C.**, 403.
- Higginson, William C. E.** See **Scott, Keith L.**, 1339, and **Thacker, Michael A.**, 704.
- Higson, Brian M.** See **Bailey, Neil A.**, 1105.
- Hill, David M., Larkworthy, Leslie F., and O'Donoghue, Michael W.** Investigations of manganese(II) compounds of *NN*-disubstituted dithiocarbamates, 1726.
- Hill, H. Allen O.** See **Cockle, Stephen A.**, 2633.
- Hill, M. N. S., Johnson, B. F. G., Keating, T., and Lewis, J.** Reactivity of co-ordinated ligands. Part XXI. Cyclopentadienyl cyclo-enyl complexes of platinum(II), 1197.
- Hill, Norman.** See **Finch, Arthur**, 357.
- Hill, Robin, and Knox, Selby A. R.** Rhodium complexes of Group 4B ligands, 2622.
- Hillier, Ian H.** See **Birchall, Thomas**, 2003.
- Hillier, Ian H.** See **Garner, C. David**, 1934.
- Hinze, Willie, and Fendler, Janos H.** Interactions and reactions in restricted polar media. Binding of cyanide ion to hemin in surfactant-solubilized methanol in benzene, 238.
- Hitchcock, Peter B.** See **Coles, Brian F.**, 442, and **Conway, Anthony J.**, 1945.

- Hobdell**, Michael R., and **Whittingham**, Andrew C. Reaction of hydrogen with solutions of metals in liquid sodium, 1591.
- Hodgson**, Derek J. See **Estes**, Eva Dixon, 1168, and **Kozlowski**, Douglas L., 55.
- Hogenkamp**, Henricus P. C., **Vergamini**, Phillip J., and **Matwiyoff**, N. Alexander. The effect of temperature and light on the carbon-13 nuclear magnetic resonance spectra of alkylcorrinoids, selectively enriched with carbon-13, 2628.
- Holland**, David, and **Milner**, David J. Liquid-phase metal-centred autoxidation of cyclo-octene promoted by rhodium species, 2440.
- Holland**, David. See **Farrar**, Jeffrey, 815.
- Holliday**, A. Kenneth. See **Brown**, Michael P., 148.
- Holloway**, John H., and **Raynor**, J. Barrie. Electron spin resonance and Raman spectra of $[\text{ReOF}_6]^-$ and related species in aqueous hydrofluoric acid, 737.
- Holloway**, John H. See **Bagnall**, Kenneth W., 1963, and **Frlec**, Boris, 535.
- Hooper**, Alan J. See **Barker**, Marten G., 2487.
- Hooper**, Norman E. See **Chatt**, Joseph, 2392.
- Hoskins**, Bernard F., and **Martin**, Raymond L. A structural theory for non-stoichiometry. Part II. Defect fluorite-type structures: lanthanoid oxides MO_x with $1.50 \leq x \leq 1.72$, 576.
- Hoskins**, Bernard F., and **Whillans**, Francis D. Crystal and molecular structure of five-co-ordinate $\text{NNN}'\text{-tris-[2-(2'-pyridyl)ethyl]ethane-1,2-diaminenickel(II)}$ perchlorate-nitromethane, 657.
- Crystal and molecular structure of aquabis(2,2'-bipyridine)di- μ -hydroxo-sulphatodicopper(II)tetrahydrate, 1267.
- Hoskins**, Bernard F. See **Beckett**, Ronald, 908.
- Hosmane**, Narayan. See **Cradock**, Stephen, 1624.
- Hossain**, Syed F. See **Darragh**, John I., 218.
- House**, Donald A. See **Keen**, Roger D., 688.
- Howard**, Judith A. K., **Kellett**, Susan C., and **Woodward**, Peter. Crystal and molecular structure of an unbridged dinuclear species with eclipsed carbonyl groups: bis[tetracarbonyl(trimethylstannio)ruthenium](*Ru-Ru*), 2332.
- Howard**, Judith A. K., **Kerr**, Ian W., and **Woodward**, Peter. Crystal structure of dicarbonyl(1,4-difluoro-2,3,5,6-tetramethyl-1,4-diboracyclohexa-1,5-dienyl)nickel(0): a complex with a ligand analogous to duroquinone, 2466.
- Howard**, Judith, and **Woodward**, Peter. Crystal and molecular structure of μ -trimethylsilylcycloheptatrienyl-pentacarbonyltrimethylsilyldiruthenium(*Ru-Ru*): a binuclear metal complex with a bridging cycloheptatrienyl ligand, 59.
- Howard**, Judith A. K. See **Green**, Michael, 2007, 2274.
- Howarth**, Oliver W., **Moore**, Peter, and **Winterton**, Neil. A carbon-13 nuclear magnetic resonance study of *trans*-1,2-diaminocyclohexane- $\text{NNN}'\text{-tetra-acetate}$ ion and its diamagnetic metal complexes, 360.
- Howie**, R. Alan. See **Davies**, Colin G., 2241.
- Hoyano**, James K., **Legzdins**, Peter, and **Malito**, John T. Organometallic nitrosyl chemistry. Part II. Alkyl- and aryl-(η -cyclopentadienyl)dinitrosyl complexes of chromium, molybdenum, and tungsten, 1022.
- Hubberstey**, Peter. See **Down**, Michael G., 1490.
- Hudson**, Gerald A. See **Connor**, Joseph A., 1025.
- Hughes**, Barry. See **Garner**, C. David, 562.
- Hughes**, David L. Crystal structures of complexes between alkali-metal salts and cyclic polyethers. Part IX. Complex formed between dibenzo-24-crown-8 (6,7,9,10,12,13,20,21,23,24,26,27-dodecahydrodibenzo[*b,n*][1,4,7,10,13,16,19,22]octaoxacyclotetracosin) and two molecules of sodium *o*-nitrophenolate, 2374.
- Hughes**, Martin N., **Lusty**, James R., and (in part) **Barton**, Trevor J. Some metal sulphamates and their complexes with diamines and pyridine. Evidence for ambidentate behaviour and linkage isomerism of the sulphamate group, 1478.
- Hughes**, Russell P. See **Bottrill**, Martin, 1150, and **Green**, Michael, 2007.
- Humphries**, Adrian P., and **Knox**, Selby A. R. Reactions of cyclopentadiene with carbonyl-ruthenium and -osmium complexes, 1710.
- Hunter**, Geoffrey, and **Massey**, Robert C. Conformational studies of chelated sulphur- and selenium-containing ligands by nuclear magnetic resonance. Part II. Complexes of 1,3-bis(methylseleno)-2,2-dimethylpropane with chromium, molybdenum, and tungsten carbonyl complexes, 209.
- Hursthouse**, Michael B., **Jayaweera**, S. Amarasiri A., **Milburn**, Harry, and **Quick**, Andrew. Crystal structure of aqua(glycyl)-*L*-tryptophanacopper(II) dihydrate, 2569.
- Hyde**, Eileen M., and **Shaw**, Bernard L. Kinetics of addition of dihydrogen to *trans*-carbonylchlorobis(dimethylphenylphosphine)iridium(I) and *trans*-carbonylchlorobis-[(2-methoxyphenyl)dimethylphosphine]iridium(I), 765.
- Hyde**, Eileen M. See **Empson**, H. David, 1690.
- Hyde**, Michael R., and **Garner**, C. David. Kinetics and mechanism of nitrite reduction by trichloro-oxobis(triphenylphosphine oxide)molybdenum(V), 1186.
- Hyde**, Michael R. See **Garner**, C. David, 1175, 1180.

I

- Inglis**, Thomas, and **Kilner**, Melvyn. Organonitrogen groups in metal carbonyl complexes. Part IX. Amidino-derivatives of some π -cyclopentadienyl compounds, 930.
- Inglis**, Thomas, **Kilner**, Melvyn, **Reynoldson**, Timothy, and **Robertson**, (Mrs.) Elinor E. Organonitrogen groups in metal carbonyl complexes. Part VIII. Diaza-allyl derivatives of manganese, 924.
- Inglis**, Tom. See **Booth**, Brian L., 1449.
- Irving**, Roger J., and **Da Silva**, Manuel A. V. Ribeiro. Enthalpies of vaporization of some β -diketones, 798.
- Thermochemistry of tri(tropolonato)- and tri(4-methyl-tropolonato)-aluminium(III), 1257.
- Irving**, Roger J., **Post**, Michael L., and **Baker**, Roy W. Crystal and molecular structure of a tetranuclear cobalt(II)-tropolonato complex: $[\text{Co}_4(\text{C}_7\text{H}_5\text{O}_2)_8(\text{H}_2\text{O})_2]$, 1898.
- Israeli**, Mordecai, and **Pettit**, Leslie D. Co-ordination of silver(I) to olefinic bonds. Complex formation between cobalt(II), nickel(II), copper(II), zinc(II), cadmium(II), and silver(I) and some unsaturated derivatives of acetic and iminodiacetic acids, 414.
- Ito**, Takashi, and **Yamamoto**, Akio. Reactions of bis-[1,2-bis(diphenylphosphino)ethane](η -ethylene)molybdenum(0) with some electrophilic reagents and carbon dioxide, 1398.
- Ito**, Takashi. See **Chatt**, Joseph, 2348.

J

- Jackson, Sally E.** See **Green, Jennifer C.**, 403.
- Jaeger, John A., Robinson, William R., and Walton, Richard A.** Complex halides of the transition metals. Part XVII. Crystal and molecular structure of di- μ -chloro-bis{[bis-(diphenylphosphino)ethane]dichlororhenium}-bis(acetonitrile), 698.
- Jagur-Grodzinski, Joseph.** See **Shchori, Ehud**, 2381.
- James, Alan D., and Murray, Robin S.** Kinetic and equilibrium studies on iron(II) and iron(III) pentacyanoferrates, 1530.
- James, Brian R.** See **McMillan, Roderick S.**, 1006.
- Jarvis, John A. J.** See **Cassidy, John E.**, 1497.
- Jayaweera, S. Amarasiri A.** See **Hursthouse, Michael B.**, 2569.
- Johnson, Antony, and Puddephatt, Richard J.** Mechanistic studies of reactions of benzenethiol with methyl derivatives of platinum(II) and gold-(I) and -(III), 115.
- Johnson, Brian F. G., Lewis, Jack, and Quail, J. Wilson.** Reactivity of co-ordinated ligands. Part XXV. Tritylcyclo-octatetraene derivatives of tricarbonyliron and protonation of tricarbonyl(η -tritylcyclo-octatetraene)-iron, 1252.
- Johnson, Brian F. G., Lewis, Jack, Thompson, David J., and Heil, Balint.** Reactivity of co-ordinated ligands. Part XXIII. Preparation of some cyclic ketones using tricarbonyliron complexes in the presence of aluminium trichloride, 567.
- Johnson, Brian F. G., Lewis, Jack, and Twigg, Martin V.** Tetracarbonyl(phosphine)ruthenium complexes: synthesis and kinetics of carbonyl substitution, 1876.
- Johnson, Brian F. G.** See **Cherwinski, Walter J.**, 1156, **Domingos, Antonio J. P.**, 2288, **Eady, Colin R.**, 2606, **Hill, M. N. S.**, 1197, and **Segal, John A.**, 677, 1990.
- Johnston, James H., and Freeman, Alan G.** Crystal structure of the ω -isomer of chloro(diethylenetriamine)-(ethylenediamine)cobalt(III) dichloride hemihydrate, 2153.
- Jones, Christopher J., and McCleverty, Jon A.** Mercaptide insertion reactions of an iron-iron bond, 701.
- Jones, David H.** See **Addison, Clifford C.**, 830.
- Jones, Geoffrey C. H.** See **Williams, Alan F.**, 1952.
- Jones, J. B., and Urech, D. S.** Metal-ligand bonding in some vanadium compounds: a study based on X-ray emission data, 1885.
- Jones, M. Tom (jun.).** See **Wulfman, David S.**, 522.
- Kellett, Susan C.** See **Green, Michael**, 2007, and **Howard, Judith A. K.**, 2332.
- Kelly, Raymond L.** See **Connelly, Neil G.**, 2335.
- Kemmitt, Raymond D. W.** See **Burgess, John**, 2579.
- Kennedy, John D., McFarlane, William, Pyne, Geoffrey S., and Wrackmeyer, Bernd.** Nuclear spin-spin coupling between tin and other directly bound elements, 336.
- Keper, David L.** Stereochemistry of seven-co-ordinate compounds bis(bidentate ligand)tris(unidentate ligand)-metal, 963.
- Keper, David L., and Trigwell, Keith R.** Complexes between fluoro(ditertiary arsines) and metal tetrahalides, 1903.
- Keper, David L.** See **Dewan, John C.**, 490, 546, 959, 2031, and **Druskovich, David M.**, 947.
- Kergoat, René.** See **Dewan, John C.**, 2171.
- Kerr, Ian W.** See **Howard, Judith A. K.**, 2466.
- Kettle, Sidney F. A.** See **Burrows, Edward L.**, 2353, and **Buttery, H. J.**, 969.
- Keubler, Michael, Ugo, Renato, Cenini, Sergio, and Conti, Franco.** Zerovalent platinum chemistry. Part IX. Reduction of dichlorobis(phosphine)platinum(II) by hydrazine, 1081.
- Khalil, Mutasim I.** See **Chew, K. Frank**, 1315.
- Khan, Mohammed Mahfooz.** See **Levason, William**, 1778.
- Kiernan, Patrick M., and Griffith, William P.** Studies on transition-metal cyano-complexes. Part I. Octacyano-niobates(III), -niobates(IV), -molybdates(V), and -tungstates(V), 2489.
- Kiffen, Albertus A., Masters, Christopher, and Raynand, Laurent.** Hydrogen-deuterium exchange at a saturated carbon atom in tertiary phosphine complexes of platinum(II), 853.
- Kiffen, Albertus A., Masters, Christopher, and Visser, Jacobus P.** Disproportionation of a halogen-bridged complex containing platinum and palladium, 1311.
- Kilner, Melvyn.** See **Ernstbrunner, Edgar E.**, 2598, and **Inglis, Thomas**, 924, 930.
- King, John A.** See **Power, Leslie F.**, 2072.
- King, Margaret E.** See **Bullock, Joseph I.**, 1360.
- King, Trevor J.** See **Buckle, John**, 1552, **EWINGS, Paul F. R.**, 1455, 1950, **Garner, C. David**, 562, and **Harrison, Philip G.**, 826, 2097.
- Kiremire, Enos M. R.** See **Bottomley, Frank**, 1909.
- Knox, Selby A. R., Sosinsky, Barrie A., and Stone, F. Gordon A.** Hydrocarbon complexes of ruthenium. Part VI. Reactions of bis(trimethylsilyl)- and bis(trimethylgermyl)-tetracarbonylruthenium complexes with azulenes, 1647.
- Knox, Selby A. R.** See **Burt, Jennifer C.**, 731, **Brookes, Anthony**, 1641, **Hill, Robin**, 2622, **Humphries, Adrian P.**, 1710, and **Sosinsky, Barrie A.**, 1633.
- Kopf, Peter W.** See **Helbert, John N.**, 998.
- Kozlowski, Douglas L., and Hodgson, Derek J.** Crystal and molecular structure of bis-[2-(2-aminoethyl)pyridine]diisothiocyanatocopper(II), 55.
- Kramer, Petrus A., and Masters, Christopher.** Homogeneous platinum(II)-catalysed hydrogen-deuterium exchange at a saturated carbon atom, 849.
- Krishnamachari, Narasimhan.** See **Roe, David M.**, 125.
- Krishnamurthy, S. S., Lappert, Michael F., and Pedley, J. Brian.** Bonding studies of compounds of boron and the Group 3-5 elements. Part XIV. Redistribution equilibria in phenylboron dihalide and boron trihalide systems, 1214.

K

- Kane-Maguire, Leon A. P., and Thomas, Gwyn.** Kinetics of aquation of penta-amminechlororuthenium(III) dichloride and *cis*-dichlorobis(ethylenediamine)ruthenium(III) chloride hydrate in mixed water-organic solvents, 1324.
- Kinetics and mechanism of substitution on square-planar palladium(II) complexes in mixed aqueous solvents**, 1890.
- Keat, Rodney.** See **Dalglish, William H.**, 309.
- Keating, T.** See **Hill, M. N. S.**, 1197.
- Keen, Roger D., House, Donald A., and Powell, H. Kipton J.** Equilibrium studies. Complex formation of 4-azaheptane-1,7-diamine, 4,8-diazanonamine, and 4-aza-4-methylheptane-1,7-diamine with copper(II) ions and protons in aqueous solution, 688.

Krumholz, Pawel. See Vichi, Eduardo J. S., 1543.
Kustan, Edward H. See Berry, Frank J., 1323.

L

- Ladd, John A., and Glasberg, Brian R. Hydrogen-1 nuclear magnetic resonance study of halogen exchange between trimethyltin halides in solution, 2378.
- Laing, David K., and Pettit, Leslie D. Ligands containing elements of Group 6B. Part VII. Comparison of the donor properties of some dicarboxylic acids of sulphur, selenium, and tellurium towards silver(I) and some bivalent metal ions, 2297.
- Lanfredi, Anna Maria Manotti, Tiripicchio, Antonio, and Camellini, Marisa Tiripicchio. Behaviour of thiocarbonohydrazidium cation as a ligand. Crystal and molecular structure of dichloro-(1H⁺-thiocarbonohydrazidium-NS)-copper(II) chloride, 2168.
- Lappert, Michael F., Pedley, J. Brian, Wilkins, Bernard T., Stelzer, Othmar, and Unger, Eugen. Bonding studies of compounds of boron and the Group 3—5 elements. Part XIII. He(I) photoelectron spectra of phosphines R_nPX_{3-n} (R = Me or Bu^t; X = H, Cl, or F; n = 1—3), (Me₂N)_n-PCl_{3-n} (n = 1—3), and (R₂N)PF₂ (R = Me or Et), 1207.
- Lappert, Michael F. See Barker, Geoffrey K., 1765, Gibbins, Sidney G., 72, Harris, David H., 311, and Krishnamurthy, S. S., 1214.
- Lappin, A. Graham, and McAuley, Alexander. Metal-ion oxidations in solution. Part XIV. The formation of intermediates in the reaction of iron(III) with 2-mercapto-carboxylic acids, 1560.
- Lappin, A. Graham. See Ellis, Keith J., 1930.
- Larkin, Graham A., Mason, Ronald, and Wallbridge, Malcolm G. H. Isocyanide complexes of platinum(0), 2305.
- Larkworthy, Leslie F., Trigg, John K., and Yavari, Ahmad. Chromium(II) chemistry. Part IX. Ferromagnetic and antiferromagnetic chlorochromates(II), 1879.
- Larkworthy, Leslie F. See Fitzsimmons, Brian W., 1969, and Hill, David M., 1726.
- Laughlin, David R. See Davies, Colin G., 2241.
- Laurence, Gerald S. See Falcinella, Bruno, 1.
- Laurie, Stuart H., Lund, Trevor, and Raynor, J. Barrie. Electronic absorption and electron spin resonance studies on the interaction between the biologically relevant copper(II) glycylglycine and L-histidine complexes with D-penicillamine, 1389.
- Lawrance, Geoffrey A. See Hay, Robert W., 779, 1466, 1556.
- Leach, John B., Oates, Gerald, Tang, Stephen, and Onak, Thomas. Formation of silylcarbaboranes from 1,2-bis(trimethylsilyl)pentaborane(9), 1018.
- Lee, Hing-Biu, and Maitlis, Peter M. Pentamethylcyclopentadienyl-rhodium and -iridium complexes. Part IX. The formation of η -allyl-M^{III} and η -diene-M^I complexes from μ -hydrido-compounds and acyclic dienes, 2316.
- Lee, Hing-Biu, Moseley, Keith, White, Colin, and Maitlis, Peter M. Pentamethylcyclopentadienyl-rhodium and -iridium complexes. Part X. The kinetics of the reactions of some cyclic and acyclic dienes with μ -hydrido-compounds, 2322.
- Leech, David H., and Machin, David J. Preparation and magnetic properties of some alkali-metal salts of chlorochromate(II) and chlorochromate(III) anions, 1609.
- Leech, David H. See Gregson, Anthony K., 1306.
- Legzdins, Peter. See Hoyano, James K., 1022.
- Leigh, G. Jeffery. See Anker, Maurice W., 2639, and Chatt, Joseph, 2392.
- Leporati, Enrico. See Braibanti, Antonio, 1319.
- Letkeman, Peter, and Westmore, John B. Metal-amino-polycarboxylic acid complexes. Part V. Kinetic study of the dissociation of cadmium complexes of N-carboxymethyliminobis(ethylenenitrilo-N'-N'-diacetic acid) by a polarographic method, 480.
- Levason, William, McAuliffe, Charles A., Khan, Mohammed Mahfooz, and Neslon, S. Martin. Magnetic cross-over in six-co-ordinate iron(II) complexes of *cis*-1,2-bis(diphenyl phosphino)ethylene, 1778.
- Levason, William, McAuliffe, Charles A., and Murray, Stephen G. Co-ordination complexes containing multidentate ligands. Part VIII. Synthesis of three bis(o-methylthiophenylthio)alkanes and their reactions with cobalt(II), nickel(II), copper(II), palladium(II), platinum(II), and rhodium(III) salts, 1566.
- Leverett, Peter. See Evans, Howard T. (jun.), 505.
- Lewellyn, Mark. See Harris, Robin K., 61.
- Lewis, Brian. See Bond, Alan, 1109, and Green, Michael, 1118, 1137.
- Lewis, Jack. See Hill, M. N. S., 1197, Cherwinski, Walter J., 1156, Domingos, Antonio J. P., 2288, Eady, Colin R., 2606, and Johnson, Brian F. G., 567, 1252, 1876.
- Lidster, Philip E. See Bagnall, Kenneth W., 1249.
- Lim, Yau Y., and Chua, Kee L. Nuclear magnetic resonance studies of Lewis acid-base interactions. Part II. A correlation between isotropic contact shifts and Taft σ^* values for some pyridine base adducts of nickel(II) bis(o-alkyl dithiocarbonates) and bis(β -diketonates), 1917.
- Lincoll, Stephen F., Sandercock, Alan C., and Stranks, Donald R. Chloride-exchange processes on gallium(III) in concentrated aqueous chloride solutions: a chlorine-35 and gallium-71 magnetic resonance study, 669.
- Lindon, John C. See Beattie, Ian R., 1264.
- Lindsell, W. Edward. Electron spin resonance studies of bis(η -cyclopentadienyl) compounds of molybdenum and tungsten, 2548.
- Lindsell, W. Edward, and Faulds, Gavin R. Complexes of sulphur bis(t-butylimide) with some transition metals, 40.
- Livingstone, Stanley E. See Das, Manoranjan, 452, and Filipczuk, Stephen W., 886.
- Lloyd, Douglas. See March, Frank C., 1377.
- Lloyd, Malcolm K. See Bottrill, Martin, 1150.
- Logan, Norman. See Addison, Clifford C., 830, Chew, K. Frank, 1315, and Harrison, Brian, 1384.
- Long, Gary J., Bertrand, Gary L., Noel, Dale, Wu, Shu H., Mayhan, Kenneth G., and Coffen, David L. The transition-metal chemistry of quinuclidinone-containing ligands. Part VI. A study of the thermal properties of several complexes with *trans*-2-(2-quinolyl)methylenequinuclidine-3-one, 762.
- Long, Gary J., and Schlemper, Elmer O. Transition-metal chemistry of quinuclidinone-containing ligands. Part V. Crystal structure of dichloro-[*trans*-2-(2-quinolyl)methylenequinuclidine-3-one]cobalt(II), 96.
- Lopez, Omar Velasquez. See Alvey, P. John, 1277, and Bagnall, Kenneth W., 1409.
- Losee, D. Bruce. See Eckberg, Richard P., 633.
- Lucie, Jean-Michel, Stranks, Donald R., and Burgess, John. Volumes of activation for aquation of tris(1,10-phenanthroline)iron(II) complexes in aqueous solution, 245.

- Lund, Trevor.** See **Bramman, Paul F.**, 45, **Herberich, G. E.**, 985, and **Laurie, Stuart H.**, 1389.
Lusty, James R. See **Hughes, Martin N.**, 1478.
Lyle, Samuel J., Walsh, Peter T., Witts, Alan D., and Ross, Jeffrey W. Mössbauer spectroscopic study of the gadolinium-hydrogen system, 1406.
Lyle, Samuel J., and Witts, Alan D. Mössbauer spectroscopic investigation of some europium(III) diketonates, 185.

M

- Mabbs, Frank E.** See **Boorman, P. Michael**, 1299, **Garner, C. David**, 1175, 1180, and **McFadden, Dennis L.**, 263.
Machin, David J. See **Arjomand, Mehran**, 1055, 1061, and **Leech, David H.**, 1609.
Mackay, Kenneth M. See **Graham Bruce W. L.**, 475.
MacLagan Robert G. A. R. See **Butcher, Raymond J.**, 1223.
Maddock, Alfred G. See **Clark, Michael G.**, 120, and **Williams, Alan F.**, 1952, 1958.
Maddren, Paul S., Modinos, Anthony, Timms, Peter L., and Woodward, Peter. Metal complexes of 1,4-difluoro-2,3,5,6-tetramethyl-2,5-diboracyclohexa-1,4-diene, an analogue of duroquinone. Crystal structure of bis(1,4-difluoro-2,3,5,6-tetramethyl-1,4-diboracyclohexa-2,5-diene)nickel(0), 1272.
Mague, Joel T. Fluorocarbon complexes of the transition metals. Part III. Chemistry of tertiary arsine derivatives of tetrakis(trifluoromethyl)rhodacyclopentadiene, 900.
Maitlis, Peter M. See **Roe, David M.**, 125.
Maitlis, Peter M. See **Lee, Hing-Biu**, 2316, 2322.
Makar, George K. R. See **Corrie, Anna M.**, 105.
Malito, John T. See **Hoyano, James K.**, 1022.
Manassero, Mario. See **Ciani, Gianfranco**, 2156.
Mani, Fabrizio, Stoppioni, Piero, and Sacconi, Luigi. Synthesis and characterization of chromium(II) complexes of tris(2-diphenylphosphinoethyl)phosphine and *o*-phenylenebis(dimethylarsine), 461.
Mann, Brian E., and Musco, Alfredo. Phosphorus-31 nuclear magnetic resonance spectroscopic characterization of tertiary phosphine palladium(0) complexes: evidence for 14-electron complexes in solution, 1673.
Manning, A. R. See **Dickinson, Roger J.**, 424, and **Hackett, Paul**, 1606.
Manohar, Hattikudur. See **Bhandary, K. Krishna**, 288.
Marangoni, Giampaolo. See **Baracco, Livio**, 2161.
Maraschini, Francesco. See **Bossa, Mario**, 596.
Marčec, Radovan, and Orhanović, Mato. Kinetics of aquation and formation of the tetra-aqua(2,2'-bipyridyl)-chromium(III) ion, 319.
March, Frank C., and Ferguson, George. Stereochemistry of some organic derivatives of Group Vb elements. Part VI. Crystal and molecular structure of μ -oxo-bis[perchloratotriphenylbismuth(V)]. Part VIII. Crystal and molecular structure of μ -chloro-bis[hydroxytri-phenylarsenic](1+) dichloroiodate (1-), 1291, 1381.
March, Frank C., Ferguson, George, and Lloyd, Douglas. Stereochemistry of some organic derivatives of Group VB elements. Part VII. Crystal and molecular structure of triphenyl-(2-acetyl-3,4,5-triphenylcyclopenta-2,4-dienyl)arsonium perchlorate, 1377.
Maresca, Luciana, Natile, Giovanni, Cattalini, Lucio, and Gasparini, Francesco. Complexes of osazones with palladium(II) and platinum(II): isomerization, oxidation, and *ortho*-metallation of the co-ordinated ligands, 1601.
Marsich, Nazario. See **Camus, Annamaria**, 2560.
Martin, John W. L., and Curtis, Neil F. Some metal-ion complexes with ligands formed by reaction of amines with aliphatic carbonyl compounds. Part V. Nickel(II) β -hydroxyimine complexes formed by reaction of amine complexes with 4-hydroxy-4-methylpentan-2-one, 87.
Martin, Raymond L. See **Hendrickson, Alan R.**, 2182, and **Hoskins, Bernard F.**, 576.
Martinengo, Secondo. See **Albano, Vincenzo G.**, 305.
Maslen, Edward N., Greaney, Terence M., Raston, Colin L., and White, Allan H. Crystal structure of catena-di- μ -acetylacetonato-cadmium(II), 400.
Maslen, Edward N., Raston, Colin L., and White, Allan H. Crystal structure of aqua (2,2':6',2'':6'',2''':6'''-quaterpyridyl)-sulphitocobalt(III) nitrate monohydrate, 323.
Maslen, Edward N., Raston, Colin L., White, Allan H., and Yandell, John K. Crystal structure of *trans*-aquabis-(ethylenediamine)sulphitocobalt(III) perchlorate monohydrate, 327.
Mason, Joan. The dimeric nitrogen oxides. Part I. Electronic absorption of the nitrogen oxide dimer, and comparison of observed and calculated spectra for dinitrogen dioxide, trioxide, and tetraoxide, 19.
 Nuclear magnetic shielding of hydrogen in the hydrides of the elements, 1422.
 Nuclear magnetic shielding of fluorine in the fluorides of the elements, 1426.
Mason, Joan, and Vinter, Jeremy G. Nitrogen nuclear magnetic resonance spectroscopy. Part V. Diazirine, diazomethane, and related azo-, diazo- and tetra-azo-compounds, some comments on dinitrogen as a ligand, and an improved absolute scale for nitrogen shielding, 2522.
Mason, Ronald. See **Larkin, Graham A.**, 2305.
Masood-ul-Hasan, Shaw, Robert A., and Woods, Michael. Phosphorus-nitrogen compounds. Part XLI. Reactions of hexachlorocyclotriphosphazatriene with dibenzylamine and benzylamine: the importance of steric effects. Isolation of a stable chlorodibenzylaminotetra-kisdimethylamino-derivative, 2202.
Masood-ul-Hasan. See **Dalglish, William H.**, 309.
Massey, Robert C. See **Hunter, Geoffrey**, 209.
Maslen, Edward N. See **Greaney, Terence M.**, 876.
Masters, Christopher. See **Clague, A. Derek H.**, 858, **Kiffen, Albertus A.**, 853, 1311, and **Kramer, Petrus A.**, 849.
Mather, I. H. See **Gillard, R. D.**, 133.
Matwiyoff, N. Alexander. See **Hogenkamp, Henricus P. C.**, 2628.
Mayhan, Kenneth G. See **Long, Gary J.**, 762.
Mays, Martin J. See **Bellerby, John M.**, 1281, and **Cooke, Clive G.**, 455.
McAuley, Alexander. See **Ellis, Keith J.**, 1930, **Lappin, A. Graham**, 1560, **McCann, John P.**, 783, and **Olatunji, M. Adegboyega**, 682.
McAuliffe, Charles A. See **Levason, William**, 1566, 1778.
McCann, John P., and McAuley, Alexander. Metal-ion oxidations in solution. Part XIII. The reaction of chromium(VI) with L-cysteine in perchlorate media, 783.
McCleverty, Jon A., Seddon, Duncan, and Whiteley, R. (Bob) N. Arylazo, arylid-imide, and some isocyanide complexes of ruthenium, 839.

- McCleverty, Jon A.** See **Jones, Christopher J.**, 701.
- McDaniel, Robert S.** See **Wulfman, David S.**, 522.
- McDermott, Connor P.** See **Finch, Arthur**, 967.
- McFadden, Dennis L., and McPhail, Andrew T.** Crystal and molecular structures of dinitrato(1,10-phenanthroline)copper(II) and diaquanitrato(1,10-phenanthroline)-copper(II) nitrate, 1993.
- McFadden, Dennis L., McPhail, Andrew T., Garner, C. David, and Mabbs, Frank E.** Crystal and molecular structure, electron spin resonance, and electronic spectrum of hexakis(imidazole)copper(II) nitrate, 263.
- McFadden, Dennis L.** See **McPhail, Andrew T.**, 1784.
- McFarland, John J.** See **Cairns, Maxwell A.**, 1159.
- McFarlane, William.** See **Harris, David H.**, 311, and **Kennedy, John D.**, 386.
- McIlroy, Paul D. A.** See **Drew, Michael G. B.**, 2507.
- McKenzie, E. Donald.** See **Bailey, Neil A.**, 1105.
- McMeeking, Robert F.** See **Gerloch, Malcolm**, 2443, 2452.
- McMillan, Roderick S., Mercer, Anthony, James, Brian R., and Trotter, James.** Preparation, characterization, and crystal and molecular structure of dimethylammonium trichlorotris(dimethylsulphoxide)ruthenate(II), 1006.
- McPhail, Andrew T., and McFadden, Dennis L.** X-Ray crystal structure characterization of cyclo(hexacyanoborane), (BH₂CN)₆, 1784.
- McPhail, Andrew T.** See **McFadden, Dennis L.**, 263, 1993.
- McWhinnie, William R.** See **Dance, Nigel S.**, 43, and **Dias, Shelton A.**, 162.
- Meek, Devon W.** See **Du Bois, Daniel L.**, 1011.
- Meikle, George D.** See **Craddock, Stephen**, 805.
- Meikle, Gordon D.** See **Fraser, George W.**, 1033.
- Mengozzi, Carlo.** See **Ciampolini, Mario**, 2051.
- Mentasti, Edoardo.** See **Pelizzetti, Ezio**, 794, 2086.
- Mercer, Anthony, and Trotter, James.** Crystal and molecular structure of dichlorotetrakis(dimethyl sulphoxide)ruthenium(II), 2480.
- Mercer, Anthony.** See **McMillan, Roderick S.**, 1006.
- Mertis, Konstantinos, Williamson, David H., and Wilkinson, Geoffrey.** The chemistry of rhenium alkyls. Part I. Synthesis and properties of oxorhenium(VI) methyl and trimethylsilylmethyl compounds, 607.
- Mertis, Konstantinos.** See **Gibson, John F.**, 1093.
- Metham, Timothy N.** See **Eaborn, Colin**, 2212.
- Meyerstein, Dan.** See **Cohen, Haim**, 2477.
- Middleton, John.** See **Bevan, William I.**, 252, 620.
- Milburn, Harry.** See **Hursthouse, Michael B.**, 2569.
- Miller, Jack M.** See **Potts, Don**, 393.
- Miller, John R., and Stephens, Frederick S.** Stereochemistry of the iron atom in [Fe(CO)₂(η -C₅H₅)Y] compounds and its application to the tautomerism in bis(dicarbonyl-(η -cyclopentadienyl)iron] and related compounds, 833.
- Milner, David J.** See **Farrar, Jeffery**, 815, and **Holland, David**, 2440.
- Mitchell, Philip C. H., and Scarle, Rodney D.** Complexes of molybdenum(III) with sulphur-donor ligands, 110. Reactions of bis(diethyldithiocarbamate)oxomolybdenum(IV), 2552.
- Mitchell, Philip C. H.** See **Armour, Alan W.**, 1493.
- Mockler, Garry M.** See **Healy, Peter C.**, 691.
- Modinos, Anthony, and Woodward, Peter.** Platinum(II) complexes: crystal structure of bis(tetra-n-propylammonium) bis(carbonyldichloroplatinate(II)), 1516. Crystal and molecular structure of di- μ -carbonyl-[(μ -carbonyl-bis[(methyldiphenylphosphine)platinio]]di-carbonyl(methyldiphenylphosphine)ruthenium(2Ru-Pt)(Pt-Pt). A substituted heteronuclear cluster carbonyl of unexpected asymmetry, 1534.
- Crystal and molecular structures of 2-bis(methyldiphenylphosphine)- and of 2-bis(triphenylphosphine)-4,4,6,6-tetrakis(trifluoromethyl)-1,3,5,2-trioxaplatinan: adducts of hexafluoroacetone with peroxobis(methyldiphenylphosphine)platinum(II) and with peroxobis(triphenylphosphine)platinum(II), 2134.
- Modinos, Anthony.** See **Maddren, Paul S.**, 1272.
- Mohan, Devendra, Chhabra, Vinay Kumar, and Gupta, Yugal Kishore.** Kinetics and mechanism of oxidation of hypophosphite by hexacyanoferrate(III) ion in alkaline solution, 1737.
- Mohapatra, Sunesh K.** See **Dash, Anadi C.**, 897.
- Moore, Frank H.** See **Power, Leslie F.**, 2072.
- Moore, Peter.** See **Buck, Dorothy M. W.**, 409, and **Howarth, Oliver W.**, 360.
- Morazzoni, Franca.** See **Aràneo, Antonio**, 2039, and **Cariati, Franco**, 556.
- Moretto, Hans.** See **Craddock, Stephen**, 390.
- Mori, Giovanni.** See **Braibanti, Antonio**, 1319.
- Morris, Stephen H.** See **Blandamer, Michael J.**, 2118.
- Moseley, Keith.** See **Lee, Hing-Biu**, 2322.
- Moseley, Patrick T.** See **Bombieri, Gabriella**, 1520.
- Moss, Gerard P.** See **Catton, Graham A.**, 221.
- Moss, Kenneth C.** See **Dixon, Keith R.**, 990.
- Muir, Kenneth W.** Stereochemistry of phosphorus compounds. Part II. Crystal and molecular structure of 1,3-di-t-butyl-2,4-dichlorodiazadiphosphetidine, 259.
- Muir, Kenneth W.** See **Walker, Robert**, 272.
- Muir, Irene B.** See **Craddock, Stephen**, 25.
- Müller, Achim.** See **Schmidt, Karlheinz**, 2199.
- Mulvey, (Mrs.) Denise, and Waters, William A.** Reduction of alkaline aqueous disodium pentacyanonitrosylferrate (2-) (sodium nitroprusside) and kinetic features of its colour reaction with thiols, 951.
- Murray, Keith S.** Carbon-13 nuclear magnetic resonance spectra of μ -oxo-bis(disalicylideneiminatoiron) complexes, 1538.
- Murray, Robin S.** See **James, Alan D.**, 1530, and **Scott, Keith L.**, 1339.
- Murray, Stephen G.** See **Levason, William**, 1566.
- Musatti, Amos.** See **Domiano, Paolo**, 295, 2165, 2357.
- Musco, Alfredo.** See **Mann, Brian E.**, 1673.
- Myers, William H.** See **Du Bois, Daniel L.**, 1011.

N

- Nabi, (Mrs.) Safura Nurun, Shaw, Robert A., and Stratton, Cedric.** Phosphorus-nitrogen compounds. Part XL. The hydrogen halide-induced deaminolysis of hexakisdimethylaminocyclotriphosphazatriene and the *cis-trans*-isomerisation of halogenodimethylaminocyclotriphosphazatrienes, 588.
- Nabi, Syed Nurun, Biddlestone, Malcolm, and Shaw, Robert A.** Structure and basicity. Part IX. Triphenylphosphazenylicyclophosphazenes: examples of exo- and endo-cyclic protonations and the relation of these to the conformation of the triphenylphosphazenylic group, 2634.
- Nae, Nehemia.** See **Shchori, Ehud**, 2381.
- Nakagawa, Toshio.** See **Totani, Tetsushi**, 1938.
- Nakai, Hiroshi.** See **Totani, Tetsushi**, 1938.
- Nanda, Raleindra.** See **Dash, Anadi C.**, 897.
- Napoleitano, Tommaso.** See **Aràneo, Antonio**, 2039.

- Nardelli, Mario, Pelizzi, Corrado, and Pelizzi, Giancarlo.** Tin complexes containing the nitrate group: crystal structure of polymeric (2-aminobenzothiazolato)nitratotin(II), 1595.
- Nardelli, Mario.** See **Domiano, Paolo**, 295, 2165, 2357.
- Nardin, Giorgio, Randaccio, Lucio, and Zangrando, Ennio.** Stereochemistry of copper(I) complexes. Part II. The molecular structure of the 3:2 reaction product between copper iodide and bis(diphenylphosphino)methane: di- μ -[bis(diphenylphosphino)methane]- μ -iodo-di- μ_3 -iodo-triangulo-tricopper(I)-0.5 dichloromethane, 2566.
- Nardin, Giorgio.** See **Camus, Annamaria**, 2560.
- Natile, Giovanni.** See **Annibale, Giuliano**, 188, and **Maresca, Luciana**, 1601.
- Nelson, Deanna J., and Symons, Martyn C. R.** Unstable intermediates. Part CLIII. Electron spin resonance spectra and structure of dichlorophosphoranyl radicals, 1164.
- Nelson, S. Martin.** See **Arthurs, Michael**, 1794, **Drew, Michael G. B.**, 2507, and **Levason, William**, 1778.
- Newlands, Michael J.** See **Devine, Anthony M.**, 1434, 1822.
- Nicholls, C. J., and Urch, D. S.** X-Ray emission and photoelectron spectra from magnesium oxide: a discussion of the bonding based on the unit Mg_2O_4 , 2143.
- Nixon, John F.** See **Head, Robert A.**, 2054.
- Noel, Dale.** See **Long, Gary J.**, 762.
- Nolan, Kevin B.** See **Hay, Robert W.**, 1348, 1621.
- Nolte, Christian R.** See **English, Robin B.**, 1030.
- Norbury, A. Hugh, Shaw, Peter E., and Sinha, A. Ishwari P.** Solvent effects on the mode of co-ordination of the thiocyanate ion: a study on some bis(dimethylglyoximate)thiocyanatocobalt(III) complexes, 742.
- Nord, Gwyneth, and Wernberg, Ole.** Reduction of tris(2,2'-bipyridyl) and tris(1,10-phenanthroline) complexes of iron(III) and osmium(III) by hydroxide ion, 845.
- Norton, Jack R.** See **Cherwinski, Walter J.**, 1156.
- Nunn, Ernest K.** See **Blackwell, Leslie J.**, 2068.
- O**
- Oates, Gerald.** See **Leach, John B.**, 1018.
- O'Connor, Charmian J.** See **Dutta-Chaudhuri, Subrata**, 1921.
- Odell, Allan L.** See **Dutta-Chaudhuri, Subrata**, 1921.
- O'Donoghue, Michael W.** See **Hill, David M.**, 1726.
- Ojo, J. Folorunso, Taylor, Roger S., and Sykes, A. Geoffrey.** Kinetics of the rapid monomer-dimer equilibration of molybdenum(VI) in aqueous perchloric acid solutions, 500.
- Ojo, J. Folorunso.** See **Wharton, Roland K.**, 1526.
- Olatunji, M. Adegboyega, and McAuley, Alexander.** Metal-ion oxidations in solution. Part XII. Oxidation of thiourea and NN' -ethylenethiourea by chromium(VI) in perchlorate media, 682.
- Onak, Thomas.** See **Dobbie, Robert C.**, 2603, and **Leach, John B.**, 1018.
- Orhanović, Mato.** See **Marčec, Radovan**, 319.
- Orioli, Pier Luigi.** See **Ciampolini, Mario**, 2051, and **Colamarino, Paolo**, 1656.
- Othman, A. Hamid Bin.** See **Drew, Michael G. B.**, 2507.
- Ottaway, Martyn R.** See **Gallagher, Kevin J.**, 978.
- P**
- Paddock, Norman L.** See **Searle, Harold T.**, 203.
- Paige, Harvey L.** See **Desjardins, C. David**, 488.
- Paoletti, Piero.** See **Bianchini, Claudio**, 1036.
- Paolucci, Gino.** See **Baracco, Livio**, 2161.
- Parish, R. V. (Dick).** See **Betts, Christopher E.**, 2215, 2218, and **Dickinson, Roger J.**, 424.
- Parkins, Adrian W., and Slade, Roger C.** A model for catalysis by nickel(II) complexes, 1352.
- Parry, Graham, and Pulham, Richard J.** Reaction of hydrogen with liquid potassium, 446.
- Rate of reaction of hydrogen with liquid lithium: comparison with sodium and potassium, 1915.
- Reaction of ethylene at the surface of liquid potassium, 2576.
- Passmore, Jack.** See **Desjardins, C. David**, 488.
- Pasteur, Ghislaine A.** See **Tofield, Bruce C.**, 1806.
- Patel, Ramesh R.** See **Fitzsimmons, Brian W.**, 1969.
- Patmore, David J., Rendle, David F., Storr, Alan, and Trotter, James.** Crystal and molecular structures of bis(dimethylbis(1-pyrazolyl)gallato)copper(II) and bis-[dimethylbis(3,5-dimethyl-1-pyrazolyl)gallato)copper(II), 718.
- Patmore, David J.** See **Breakell, Kenneth R.**, 749.
- Patmore, David J.** See **Herring, F. Geoffrey**, 711.
- Paul, I.** See **Buttery, H. J.**, 969.
- Pauson, Peter L., and Segal, John A.** Preparation and reactivity of (η -arene)tricarbonylmanganese cations bearing functional substituents, 1677.
- Formation of substituted cyclohexadienyl tricarbonylmanganese complexes by nucleophilic addition reactions of functionally substituted (η -arene)tricarbonylmanganese cations, 1683.
- (η -Cycloheptatriene)- and (η -cycloheptatrienylum)-(η -cyclopentadienyl)manganese. Formation of cyclic triene complexes by photochemical displacement of three carbonyl groups from tricarbonyl(η -cyclopentadienyl)manganese, 2387.
- Pawson, David, and Griffith, William P.** Metal nitrido- and oxo-complexes. Part II. Osmium and ruthenium nitrido-complexes with Group 5 ligands and their reactions, 417.
- Payne, Nicholas C.** See **Bancroft, G. Michael**, 973.
- Payne, S. John.** See **Adams, David M.**, 215.
- Peace, Billy W.** See **Wulfman, David S.**, 522.
- Peacock, Raymond D.** See **Burgess, John**, 1565.
- Pedley, J. Brian.** See **Barker, Geoffrey K.**, 1765, **Gibbins, Sidney G.**, 72, **Krishnamurthy, S. S.**, 1214, and **Lappert, Michael F.**, 1207.
- Pelizzetti, Ezio, and Mentasti, Edoardo.** Kinetics of oxidation of formic acid by silver(II) in aqueous perchloric acid solution, 2086.
- Pelizzetti, Ezio, Mentasti, Edoardo, Carlotti, Maria E., and Giraudi, Gianfranco.** Kinetics of oxidation of 1,4-dihydroxy-, 1-hydroxy-4-methoxy-, and 1,4-dihydroxy-2-methyl-benzene by thallium(III) in aqueous perchlorate media, 794.
- Pelizzi, Corrado.** See **Domiano, Paolo**, 295, 2357, and **Nardelli, Mario**, 1595.
- Pelizzi, Giancarlo.** See **Nardelli, Mario**, 1595.
- Pereira, Angelo R.** See **Birchall, Thomas**, 1087.
- Perkins, Ian.** See **Booth, Brian L.**, 1843, 1847.
- Perotti, Angelo.** See **Dal Negro, Alberto**, 1232.
- Perrin, Douglas D.** See **Agarwal, Raghunath P.**, 268, 1045.
- Petillon, François.** See **Dewan, John C.**, 2295.
- Pett, Clive.** See **Goddard, Vivian W.**, 767.
- Pettit, Leslie D.** See **Brookes, Glenn**, 2106, 2112, 2302, **Israeli, Mordecai**, 414, and **Laing, David K.**, 2297.

- Phillips, Frederick L., and Skapski, Andrzej C.** Crystal and molecular structure of bis[μ -oxo-oxo(tetramethylethane-1,2-diolato)osmium(vi)]; a dimeric monoester complex with square-pyramidal co-ordination, 2586.
- Phillips, Robin C.** See **Ewings, Paul F. R.**, 1950.
- Phillips, Simon E. V., and Truter, Mary R.** Crystal structure of a hydrated complex of sodium iodide with phenacylkojate [2-(hydroxymethyl)-5-phenacyl-4H-pyran-4-one], 1066.
- Crystal structure of phenacylkojate [2-(hydroxymethyl)-5-phenacyl-4H-pyran-4-one] monohydrate and comparison with some of its complexes with alkali-metal salts, 1071.
- Pickett, Christopher J., and Pletcher, Derek.** Electrochemical oxidation and reduction of binary metal carbonyls in aprotic solvents, 879.
- Pidcock, Alan.** See **Bushnell, Gordon W.**, 572, **Courtis, Barbara**, 2460, **Dent, Stephen P.**, 2646, and **Eaborn, Colin**, 809, 2212.
- Pierce-Butler, Melanie.** See **Alcock, Nathaniel W.**, 2469.
- Pilbrow, John R.** See **De Bolfo, Joan A.**, 1523.
- Pilbrow, Malcolm F.** Bromine, benzene, carbon disulphide, and chlorinated methane adducts of platinum dichloride, 2432.
- Platt, Eric.** See **Claxton, Thomas A.**, 1395.
- Pletcher, Derek.** See **Pickett, Christopher J.**, 879.
- Pletcher, James.** See **Power, Leslie F.**, 2494.
- Poindexter, Edward H.** See **Helbert, John N.**, 998.
- Poland, John S.** See **Harris, David H.**, 311.
- Pollock, R. J. Ivan.** See **Glockling, Frank**, 497.
- Pomeroy, Roland K.** See **Cullen, William R.**, 1216.
- Pool, Colin R.** See **Haszeldine, Robert N.**, 2177, 2292.
- Porte, Andrew L.** See **Al-Mowali, Ali H.**, 50, 250, and **Dalglish, William H.**, 309.
- Post, Michael L.** See **Irving, Roger J.**, 1898.
- Potts, Don, and Miller, Jack M.** Mass spectral studies of the anhydrous methyl tin nitrates, 393.
- Potts, Philip J.** See **Griffiths, Trevor R.**, 344.
- Powell, H. Kipton J.** See **Butcher, Raymond J.**, 1223, **Keen, Roger D.**, 688, and **Sew, Kee Teng**, 2023.
- Power, Leslie F., King, John A., and Moore, Frank H.** Refinement of the crystal and molecular structure of tetra-aquabis(dicyanomercury(II))zinc(II) nitrate trihydrate by neutron diffraction, 2072.
- Power, Leslie F., Tait, A. Martin, Pletcher, James, and Sax, Martin.** Crystal and molecular structure of bis(8-amino-2-methylquinoline)nitratonickel(II) nitrate, 2494.
- Predieri, Giovanni.** See **Domiano, Paolo**, 2165, 2357.
- Pramanik, Panchanan.** See **Bera, Jaharlal L.**, 2436.
- Prescott, Ann, Sharp, David W. A., and Winfield, John M.** Formation of metal heptafluorotungstates(VI) in acetonitrile, 934.
- Oxidation of metals by molybdenum and tungsten hexafluorides in acetonitrile, 936.
- Pribanić, Marijan.** See **Bradić, Zdravko**, 353.
- Prince, Reginald H., and Segal, Michael G.** Electron-transfer reactions of cobaloximes: kinetics and mechanisms of the vanadium(II) reduction of diammine-, amminebromo-, and amminechloro-bis(dimethylglyoximate)cobalt(III), 330.
- Electron-transfer reactions of cobaloximes. Part II. The transition from outer- to inner-sphere mechanisms with vanadium(II): a non-linear free-energy relation, 1245.
- Pucheault, Jacques.** See **Gardès-Albert, Monique**, 2075.
- Puddephatt, Richard J., and Thompson, Peter J.** Methyl for halogen exchange reactions between palladium(II), platinum(II), gold(I), and gold(III) complexes, 1810.
- Puddephatt, Richard J.** See **Johnson, Antony**, 115.
- Pulham, Richard J.** See **Addison, C. Clifford**, 2082, **Down, Michael G.**, 1490, and **Parry, Graham**, 446, 1915, 2576.
- Pyne, Geoffrey S.** See **Kennedy, John D.**, 386.

Q

- Quail, J. Wilson.** See **Johnson, Brian F. G.**, 1252.
- Quick, Andrew.** See **Hursthouse, Michael B.**, 2569.

R

- Radford, Donald V.** See **Filipczuk, Stephen W.**, 886.
- Randaccio, Lucio.** See **Camus, Annamaria**, 2560, and **Nardin, Giorgio**, 2566.
- Ranganathan, T. N.** See **Searle, Harold T.**, 203.
- Rankin, David W. H.** See **Arnold, David E. J.**, 889, and **Cradock, Stephen**, 390, 805.
- Raston, Colin L., and White, Allan H.** Structural studies in the ruthenium-dithiocarbamate system. Part I. Crystal structure of tris(morpholydithiocarbamato)-ruthenium(III)-2.5 chloroform. Part II. Crystal structures of two salts of the $[\text{Ru}_2(\text{dte})_6]^+$ cation, one containing the $[\text{Ru}_2\text{Cl}_6]^{2-}$ anion. Part III. Crystal structure of di[μ -diethyldithiocarbamato-carbonyl-diethyldithiocarbamatoruthenium(II)]. Part IV. Crystal structure of a trinuclear ruthenium(II) carbonyl dithiocarbamate chloride, 2405, 2410, 2418, 2422.
- Crystal structures of tris(diethyldithiocarbamato)-rhodium(III) and -arsenic(III), 2425.
- Raston, Colin L., White, Allan H., and Willis, Anthony C.** Crystal structure of tris(dithiocarbamato)cobalt(III), 2429.
- Raston, Colin L.** See **Dewan, John C.**, 2031, **Greaney, Terence M.**, 876, and **Maslen, Edward N.**, 327, 400.
- Raynand, Laurent.** See **Kiffen, Albertus A.**, 853.
- Raynor, J. Barrie.** See **Bramman, Paul F.**, 45, **Harrison, Brian**, 1384, **Herberich, G. E.**, 985, **Holloway, John H.**, 737, and **Laurie, Stuart H.**, 1389.
- Rempel, Garry L.** See **Byerley, John J.**, 1329.
- Rendle, David F., Storr, Alan, and Trotter, James.** Crystal and molecular structure of bis(dimethylbis(pyrazol-1-yl)-gallato)-nickel(II), 176.
- Rendle, David F.** See **Breakell, Kenneth R.**, 1584, **Ferguson, George**, 1284, and **Patmore, David J.**, 718.
- Restivo, Roderic J.** See **Alyea, Elmer C.**, 1294.
- Reynolds, Warren L.** See **Glavas, Mira**, 1706.
- Reynoldson, Timothy.** See **Inglis, Thomas**, 924.
- Rice, David A.** See **Britnell, David**, 28, 213, **Cook, John A.**, 1973, and **Drew, Michael G. B.**, 144.
- Ricevuto, Vittorio.** See **Cattalini, Lucio**, 771.
- Richards, John A.** See **Buckle, John**, 1552, **Ewings, Paul F. R.**, 1950, and **Harrison, Philip G.**, 826, 2097.
- Richards, Roger.** See **Edwards, Dennis A.**, 637.
- Rickard, Clifton E. F.** See **Braithwaite, Andrew C.**, 1817, 2149.
- Ridley, Donald R.** See **Ferguson, George**, 1288.
- Riera, Victor.** See **Brookes, Anthony**, 1641.
- Roberts, Nigel.** See **Finch, Arthur**, 357.
- Robertson, Donald R.** See **Cole-Hamilton, David J.**, 1260.

- Robertson, (Mrs) Elinor E.** See **Inglis, Thomas**, 924.
Robertson, Glyn B. See **Alcock, Nathaniel W.**, 2483.
Robinson, Brian H. See **Elder, Peter A.**, 1771, and **Gardner, Peter J.**, 2582.
Robinson, Stephen D. See **Critchlow, Peter B.**, 1367, and **Dobson, Alan**, 370.
Robinson, Ward T., and Sinn, Ekk. Synthesis, structure, and properties of trichloro- and tribromo-(2,9-dimethyl-1,10-phenanthroline)gold(III), 726.
Robinson, William R. See **Jaeger, John A.**, 698.
Rockenbauer, Antal, Budó-Záhonyi, Éva, and Simándi, László I. Electron spin resonance studies on bis-(dimethylglyoximate)cobalt(II) and its complexes with pyridine, 1729.
Roe, David M., Calvo, Crispin, Krishnamachari, Narasimhan, and Maitlis, Peter M. Acetylenes and noble metal compounds. Part XII. Reactions of dimethyl acetylenedicarboxylate with palladium(II) chloride and the structure of {[chloro(methoxycarbonyl)(1,2,3,4,5-pentakis(methoxycarbonyl)cyclopenta-2,4-dienyl)-2-MeOCO]-methyl}(pentane-2,4-dionato)palladium(II), 125.
Rogers, David E. See **Alcock, Roland M.**, 2189, 2194.
Rogers, David J. See **Hazeldine, Robert N.**, 2225.
Röschenthaler, Gerd-Volker. See **Gibson, James Andrew**, 918.
Ross, Jeffrey W. See **Lyle, Samuel J.**, 1406.
Ross, Sidney D. See **Donaldson, John D.**, 1500, 1980.
Rossi, Giuseppe. See **Dal Negro, Alberto**, 1232.
Rossi, Michele. See **Gargano, Michele**, 9.
Rothon, Roger N. See **Cassidy, John E.**, 1497.
Routledge, Vincent I. See **Garner, C. David**, 1175, 1180.
Rowbottom, P. John. See **Dickinson, Roger J.**, 424.
Rowley, Roger J. See **Abel, Edward W.**, 1096.
Ruddick, John N. R. See **Goel, Ram G.**, 67.
Ruiz-Ramirez, Lena, and Stephenson, T. Anthony. Cationic and neutral complexes of ruthenium-(II) and -(III) containing tertiary phosphines or arsines and nitrogen-donor ligands, 2244.
Rupp, Herbert H. See **Hackbusch, Wolfgang**, 1015, 2364.
Russ, Charles R. See **Cooke, Michael**, 256.
Russell, David R., and Tucker, Paul A. Crystal and molecular structures of two addition products of hexafluorobut-2-yne with palladium(II) β -diketonate rings: *cis*-bis[1,2-bis(trifluoromethyl)-3-acetyl-4-oxopent-1-enyl-*O,C*¹]palladium(II) and *ab*-[1,2-bis(trifluoromethyl)-3-acetyl-4-oxopent-1-enyl-*O,C*¹]-*cd*-2-[(dimethylamino)methyl]phenyl-*C*¹,*N*]palladium(II), 1743.
 Crystal and molecular structure of *acb*[1,2-bis(trifluoromethyl)-3-acetyl-4-oxopent-1-enyl-*O',O,C*¹]-*fde*{1,4-5,6- η -[bis(trifluoromethyl)ethylene]oct-4-enyl}iridium(III): an addition product of hexafluorobut-2-yne with co-ordinated cyclo-octa-1,5-diene, 1749.
 Molecular structures of tetrafluoroethylene complexes of platinum(0). Part I. Crystal structure of tetrafluoroethylenebis(triphenylarsine)platinum(0), 1752.
 Crystal and molecular structure of *cis*-chloro(3-chloro-1,1,3,3-tetrafluoropropan-2-one)bis(triphenylphosphine)-platinum(II), 2222.
Sacconi, Luigi. See **Di Vaira, Massimo**, 493, and **Mani, Fabrizio**, 461.
Saha, Chitta Ranjan, Sen, Debabrata, and Guha, Sankarananda. Electrophilic substitution on metal biguanides and metal amidinouras, 1701.
Sahu, Gangadhar. See **Satyanarayana, Doki**, 2236.
Salama, S. B., and Wasif, Saad. Weak complexes of sulphur and selenium. Part III. Effect of solvent on the stability of 1:1 complexes of sulphur dioxide, sulphinyl dichloride, and sulphonyl dichloride with halogen ions, 151.
Salama, S. B. See **Wasif, Saad**, 2239.
Sams, John R. See **Cullen, William R.**, 1216, and **Goel, Ram G.**, 67.
Sandercok, Alan C. See **Lincoln, Stephen F.**, 669.
Sanders, J. Roger. Oxidation reactions of hydridotetrakis-(diethoxyphenylphosphine)cobalt(II) hexafluorophosphate: preparation of cationic hydridocobalt(III) complexes, 2340.
Sanders, J. Roger, Webster, David E., and Wells, Peter B. The activation of saturated hydrocarbons by transition-metal complexes in solution. Part IV. Oxidation of benzene and of alkanes by hexachloroplatinate(IV), 1191.
Sandford, William F. See **Davies, J. Eric D.**, 1912.
Sansoni, Mirella. See **Albano, Vincenzo G.**, 305, and **Ciani, Gianfranco**, 2156.
Sanz, Francisco. See **Green, Michael**, 1118.
Sasaki, Yoichi, and Sykes, A. Geoffrey. Kinetics of the complexing of Cl and NCS⁻ to [Mo(H₂O)₆]³⁺ and assignment of an S_N2 mechanism, 1048.
Sasaki, Yoichi, Taylor, Roger S., and Sykes, A. Geoffrey. Kinetics of the 1:1 equilibration of thiocyanate with the molybdenum(V) aquo-dimer, 396.
Satyanarayana, Doki, Sahu, Gangadhar, and Das, Rebat Charan. Studies on ion association: thermodynamics of formation of monoselenocyanato-complexes of cobalt(II), nickel(II), and cadmium(II), 2236.
Sax, Martin. See **Power, Leslie F.**, 2494.
Sbrana, Glauco, Braca, Giuseppe, and Benedetti, Enzo. Reactions of (η -allyl)tricarbonylchlororuthenium(II) with hydrogen and unsaturated substrates: catalytic hydrogenation and isomerisation of alkenes, 754.
Scaramuzza, Lucio. See **Bonamico, Mario**, 2079, 2250, 2594.
Scarle, Rodney D. See **Mitchell, Philip C. H.**, 110, 2552.
Schlemper, Elmer O. See **Long, Gary J.**, 96.
Schmidt, Karlheinz, Hauswirth, Wolfgang, and Müller, Achim. Vibrational spectra of nitrogen-15-substituted hexa-amminenickel(II) chloride, hexa-amminecobalt(III) chloride, and tetra-amminezinc(II) iodide, 2199.
Schmutzler, Reinhard. See **Gibson, James Andrew**, 918, and **Harris, Robin K.**, 61.
Schneider, Michael L. See **Balahura, Robert J.**, 603.
Schow, Steven. See **Goldwhite, Harold**, 12, 16.
Schrieke, Roy R. See **Conway, Anthony J.**, 2499.
Scott, Keith L., Murray, Robin S., and Higginson, William C. E. Mixed iron-cobalt binuclear complexes. Part II. Kinetics of formation and dissociation of binuclear complexes obtained from *trans*-aquabis(ethylenediamine)-sulphitocobalt(III) and cyano-complexes of iron, 1339.
Scott, Keith L., Taylor, Roger S., Wharton, Roland K., and Sykes, A. Geoffrey. Reactions of μ -hydroxo-dicobalt(III) complexes. Part XIII. Further kinetic studies on the reaction of thiocyanate with the μ -amido- μ -hydroxo-bis-[tetra-amminecobalt(III)] complex, 2119.

S

- Sabine, Raymond M.** See **Beattie, Ian R.**, 1264.
Sacco, Adriano. See **Gargano, Michele**, 9.

- Searle, Harold T., Dyson, John, Ranganathan, T. N., and Paddock, Norman L. Preparation and donor properties of the cyclic methylphosphazenes, 203.
- Seddons, Duncan. See McCleverty, Jon A., 839.
- Segal, John A., and Johnson, Brian F. G. Transition-metal nitrosyl compounds. Part X. A study of olefin rotation in $[\text{Os}(\text{CO})\text{NO}(\text{C}_2\text{H}_4)(\text{PPh}_3)_2][\text{PF}_6]$. Part XI. The preparation and the study of fluxional behaviour of some cationic acetylene complexes of osmium, 677, 1990.
- Segal, John A. See Pauson, Peter L., 1677, 1683, 2387.
- Segal, Michael G. See Prince, Reginald H., 330, 1245.
- Semprini, Elvio. See Bossa, Mario, 596.
- Sen, Debabrata. See Bera, Jaharlal L., 2436.
- Sen, Debabrata. See Saha, Chitta Ranjan, 1701.
- Sen Gupta, Kalyan K. See Finch, Arthur, 967.
- Senior, Roger G. See Garner, C. David, 1171.
- Sew, Kee Teng, and Powell, H. Kipton J. Co-ordination of oxygen by cobalt(II)-L-ornithinate and -DL-2,3-diaminopropanoate complexes in aqueous solution, 2023.
- Sham, Tsun K. See Bancroft, G. Michael, 973, 1483.
- Sharp, David W. A. See Darragh, John I., 218, Davidson, John L., 813, 2283, 2531, and Prescott, Ann, 936.
- Sharp, Graham J. See Barker, Geoffrey K., 1765, Gibbins, Sidney G., 72, and Head, Robert A., 2054.
- Sharma, Prem Dutt, and Gupta, Yugul K. Kinetics and mechanism of electron-transfer reactions of aqueous and co-ordinated thallium(III). Part X. Kinetics of reduction of hexa-aquathallium(III) by hydrogen peroxide and induction of the reaction by cerium(IV) and iron(II) ions, 81.
- Shaw, Bernard L. See Empsall, H. David, 1690, and Hyde, Eileen M., 765.
- Shaw, Peter E. See Norbury, A. Hugh, 742.
- Shaw, Robert A. See Dalgleish, William H., 309, Biddlestone, Malcolm, 2527, Masood-ul-Hasan, 2202, Nabi, Safura Nurun, 588, and Nabi, Syed Nurun, 2634.
- Shchori, Ehud, Nae, Nehemia, and Jagur-Grodzinski, Joseph. Stability constants of complexes of a series of metal cations with 6,7,9,10,17,18,20,21-octahydrodibenzo-[b,k]-[1,4,7,10,13,16]hexa-oxacyclo-octadecan (dibenzo-18-crown-6) in aqueous solutions, 2381.
- Sheldrick, George M., and Stotter, David M. Crystal and molecular structure of 2-acetylpyridine[9-(2-pyridyl)-4,8-diazadec-8-en-1-amine]nickel(II) diperchlorate, 666.
- Sheldrick, George M., and Yesinowski, James P. Proton and thallium-203 and -205 nuclear magnetic resonance and INDO studies of dimeric dimethylthallium derivatives, 870.
- Crystal structure of nonacarbonyl- μ_3 -ethylidyne-tri- μ -hydrido-triruthenium, 873.
- Sheldrick, George M. See Stotter, David A., 2124.
- Sheldrick, William S. Crystal structure of methylenebis(phosphonic dichloride), 943.
- Shenoy, Gopal K. See Asch, Lilane, 1235.
- Sheppard, Geoffrey L. See Bruce, Michael I., 591.
- Sherwood, Richard C. See Tofield, Bruce C., 1806.
- Shiro, Motoo. See Totani, Tetsushi, 1938.
- Shore, Sheldon G. See Brice, Vincent T., 334.
- Silver, Jack. See Donaldson, John D., 1500, 1980.
- Sim, George A. See Barrow, Michael J., 197, 291.
- Simándi, László I. See Rockenbauer, Antal, 1729.
- Simpson, Jim. See Elder, Peter A., 1771.
- Sindellari, Livia. See Bandoli, Giuliano, 449.
- Sinha, A. Ishwari P. See Norbury, A. Hugh, 742.
- Sinn, Ekk. See Butcher, Ray J., 2517, Healy, Peter C., 691, and Robinson, Ward T., 726.
- Skapski, Andrzej C. See Phillips, Frederick L., 2586.
- Slade, Roger C. See Barton, Trevor J., 650, and Parkins, Adrian W., 1352.
- Slim, David R. See Dewan, John C., 2171.
- Sloan, Malcolm. See Arthurs, Michael, 1794.
- Smith, Barry C. See Berry, Frank J., 1323.
- Smith, J. David. See Conway, Anthony J., 1945, 2499.
- Smith, Martin A. R. See Burgess, John, 2579, Bushnell, Gordon W., 572, and Dixon, Keith R., 990.
- Smith, Peter W. See Donovan, William F., 894.
- Smith, Thomas D. See De Bolfo, Joan A., 1523.
- Sorriso, Salvatore, and Cardaci, Guiseppe. Conformational study of π -tetracarbonyl(mono-olefin)iron complexes by infrared spectra and dipole moment measurements, 1041.
- Sosinsky, Barrie A., Knox, Selby A. R., and Stone, F. Gordon A. Hydrocarbon complexes of ruthenium. Part IV. Cyclic dienyl complexes, 1633.
- Sosinsky, Barrie A. See Brookes, Anthony, 1641, and Knox, Selby A. R., 1647.
- Sowerby, D. Bryan. See Bamgboye, T. Tunde, 2617, and Clare, Philip, 625.
- Spencer, John L. See Green, Michael, 179, 2274.
- Spivack, Bruce, and Dori, Zvi. Crystal and molecular structure of di- μ -sulphido-bis[oxo-(L-histidinato)molybdenum(V)] sesquihydrate, 1077.
- Steele, Barry R. See Eaborn, Colin, 809.
- Stelzer, Othmar. See Lappert, Michael F., 1207.
- Stephens, Frederick S. Crystal and molecular structure of μ -(dichlorostannio)-bis(tricarbonyl- π -cyclopentadienylchromium), 230.
- Stephens, Frederick S. See Campbell, Ian L. C., 22, 226, 340, 982, and Miller, John R., 833.
- Stephens, Michael. See Finch, Arthur, 967.
- Stephenson, T. Anthony. See Armit, Peter W., 1663, Cole-Hamilton, David J., 1260, and Ruiz-Ramirez, Lena, 2244.
- Stobart, Stephen R. See Angus, Philip C., 2342, and Graham, Bruce W. L., 475.
- Stockwell, James A. See Clark, Robin J. H., 468.
- Stone, F. Gordon A. See Brookes, Anthony, 1641, Bruce, Michael I., 591, 1651, Burt, Jennifer C., 731, Carroll, W. Eamon, 2263, Cooke, Michael A., 256, Game, Colin H., 2280, Green, Michael, 179, 939, 2274, Knox, Selby A. R., 1647, and Sosinsky, Barrie A., 1633.
- Stoppioni, Piero. See Mani, Fabrizio, 461.
- Storr, Alan. See Breakell, Kenneth R., 749, 1584, Herring, F. Geoffrey, 711, Patmore, David J., 718, and Rendle, David F., 176.
- Stotter, David A., Sheldrick, George M., and Taylor, Robin. Preparation and crystal and molecular structure of [1-chloro-2,2-bis(p-chlorophenyl)vinyl]bis(dimethylglyoximate)pyridinecobalt(III), 2124.
- Stotter, David M. See Sheldrick, George M., 666.
- Stranks, Donald R. See Lincoln, Stephen F., 669, and Lucie, Jean-Michel, 245.
- Stratton, Cedric. See Nabi, Safura Nurun, 588.
- Straughan, Brian P. See Clegg, William, 2591, and Dobbie, Robert C., 2368.
- Strumolo, Donatella. See Albano, Vincenzo G., 305.
- Sweigart, Dwight A., and Heidtmann, Patricia. Ligand substitution at five-co-ordinate centres. Reactions of tributylphosphine adducts of bis(O-dialkyl dithiophosphato)nickel(II) complexes, 1686.

- Swyke, Christopher.** See **Goldwhite, Harold**, 12, 16.
- Sykes, A. Geoffrey.** See **Foong, Siew-Wan**, 277, **Ojo, J. Folurunso**, 500, **Sasaki, Yoichi**, 396, 1048, **Scott, Keith L.**, 2119, and **Wharton, Roland K.**, 1526.
- Symon, David A., and Waddington, Thomas C.** Valence-band photoelectron spectra of some dicarbonyl(η -cyclopentadienyl)(ligand)iron compounds and tetrakis[carbonyl(η -cyclopentadienyl)iron(II)], 2140.
- Symons, Martyn C. R., West, Douglas X., and Wilkinson, James G.** Unstable intermediates. Part CLII. Radicals in thallos nitrate, 553.
Co-ordination of copper(II) ions doped in pentacyanonitrosylferrate(2-) and tetrathiocyanatometallate(II) salts: an electron spin resonance study, 1696.
- Symons, Martyn C. R., and Zimmerman, Donald N.** Paramagnetic transition-metal carbonyls and cyanides. Part II. An electron spin resonance study of the radiolysis of thallium(I) tetracarbonylcobaltate, 2545.
- Symons, Martyn C. R.** See **Claxton, Thomas A.**, 1395, **Fullam, Brian W.**, 861, **Ginns, Ian S.**, 514, and **Nelson, Deanna J.**, 1164.
- T**
- Tacon, John.** See **Brown, David**, 34.
- Tait, A. Martin.** See **Power, Leslie F.**, 2494.
- Takeda, Masuo, and Greenwood, Norman N.** Tellurium-125 Mössbauer spectra of some mixed oxides of tellurium(IV) and some mixed-valence oxides of tellurium(IV, VI), 2207.
- Tang, Stephen.** See **Leach, John B.**, 1018.
- Tarantelli, Turiddu, and Chiari, Brunetto.** Complexes of nickel(II) perchlorate with polymethylenebis(phenylthiourea) ligands, 286.
- Tauzher, Gianni.** See **Dreos, Renata**, 2329.
- Taylor, Derek W.** See **Barrow, Michael J.**, 197.
- Taylor, Donald.** See **Hendrickson, Alan R.**, 2182.
- Taylor, Nicholas J., Wong, Yau S., Chieh, Peter C., and Carty, Arthur J.** Syntheses, X-ray crystal structure, and vibrational spectra of L-cysteinato(methyl)mercury(II) monohydrate, 438.
- Taylor, Peter.** See **Desjardins, C. David**, 488, and **Edwards, Anthony J.**, 2174.
- Taylor, Robin.** See **Stotter, David A.**, 2124.
- Taylor, Roger S.** See **Foong, Siew-Wan**, 277, **Ojo, J. Folurunso**, 500, **Sasaki, Yoichi**, 396, and **Scott, Keith L.**, 2119.
- Taylor, Susan H.** See **Bottrill, Martin**, 1150, and **Green, Michael**, 1128, 1142.
- Tennakoon, Dayananda T. B., and Tricker, Michael J.** Surface and intercalate chemistry of layered silicates. Part V. Infra-red, ultraviolet, and visible spectroscopic studies of benzidine-montmorillonite and related systems, 1802.
- Thacker, Michael A., and Higginson, William C. E.** Kinetics of hydrolysis of di- μ -hydroxy-bis[nitrilotriacetatocobalt(III)] to diaqua(nitrilotriacetato)cobalt(III), and some reactions of the latter with non-metallic substrates in aqueous solution, 704.
- Thakuria, Brij M., and Gupta, Yugul K.** Kinetics and mechanism of electron-transfer reactions of aqueous and co-ordinated thallium(III). Part IX. Stoichiometry and kinetics of reduction of hexa-aquathallium(III) by hydroxylamine. Part XII. Reduction of hexa-aquathallium(III) by hydrazine, 77, 2541.
- Thomas, Brian S.** See **Greenwood, Norman N.**, 299.
- Thomas, Gwyn.** See **Kane-Maguire, Leon A. P.**, 1324, 1890.
- Thomas, John M.** See **Adams, John M.**, 1459.
- Thompson, David J.** See **Johnson, Brian F. G.**, 567.
- Thompson, Peter J.** See **Puddephatt, Richard J.**, 1810.
- Thornton, Peter.** See **Catterick, Janet**, 233.
- Tieghi, Giuseppe.** See **Zocchi, Marcello**, 1740.
- Timewell, Christopher W.** See **Drew, Michael G. B.**, 144.
- Timms, Peter L.** See **Hartman, J. Stephen**, 1393, and **Madden, Paul S.**, 1272.
- Tipping, Anthony E.** See **Bevan, William I.**, 252, 620, **Devine, Anthony M.**, 1434, 1822, 1832, 1837, and **Haszeldine, Robert N.**, 1431, 2177, 2225, 2292.
- Tiripicchio, Antonio.** See **Lanfredi, Anna Maria Manotti**, 2168.
- Tofield, Bruce C., Crane, Glen R., Pasteur, Ghislaine A., and Sherwood, Richard C.** Preparation and some properties of vanadium(III) tris(metaphosphate) and vanadium(IV) bis(metaphosphate), 1806.
- Tondello, Eugenio.** See **Bandoli, Giuliano**, 449.
- Tong, David A.** See **Dalgleish, William H.**, 309.
- Totani, Tetsushi, Nakai, Hiroshi, Shiro, Motoo, and Nakagawa, Toshio.** Friedel-Crafts acetylation products of (η -cyclopentadienyl)[η -(3)-1,2-dicarbaundecaborane(11)] cobalt and their molecular structures, 1938.
- Touche, Murray L. D.** See **Corrie, Anna M.**, 105.
- Trevillion, Edward A.** See **Addison, C. Clifford**, 2082.
- Tricker, Michael J.** See **Tennakoon, Dayananda T. B.**, 1802.
- Trigg, John K.** See **Larkworthy, Leslie F.**, 1879.
- Trigwell, Keith R.** See **Dewan, John C.**, 546.
- Trigwell, Keith R.** See **Keper, David L.**, 1903.
- Trotter, James.** See **Breakell, Kenneth R.**, 1584, **McMillan, Roderick S.**, 1006, **Mercer, Anthony**, 2480, **Patmore, David J.**, 718, and **Rendle, David F.**, 176.
- Trozzi, Marcello.** See **Cattalini, Lucio**, 771.
- Trumble, William R.** See **Adams, David M.**, 30.
- Truter, Mary R.** See **Phillips, Simon E. V.**, 1066, 1071.
- Tsin, Tsang B.** See **Cullen, William R.**, 1216.
- Tuck, Dennis G.** See **Habeeb, Jacob J.**, 1815.
- Tucker, Neil I.** See **Booth, Brian L.**, 1439, 1446.
- Tucker, P. A.** See **Russell, D. R.**, 1743, 1749, 1752, 2222.
- Turner, G. Kevin.** See **Evans, Dennis F.**, 1238.
- Turtle, Philip C.** See **Bosworth, Yvonne M.**, 2027.
- Twigg, Martin V.** See **Johnson, Brian F. G.**, 1876.
- U**
- Ugo, Renato.** See **Keubler, Michael**, 1081.
- Underhill, Mark.** See **Deeming, Antony J.**, 1614, and **Green, Michael**, 939.
- Unger, Eugen.** See **Lappert, Michael F.**, 1207.
- Unsworth, John B. J.** See **Coe, John S.**, 645.
- Urch, D. S.** See **Jones, J. B.**, 1885, and **Nicholls, C. J.**, 2143.
- Uttley, Michael F.** See **Dobson, Alan**, 370.
- V**
- Van Thinh, Nguyen.** See **Wulfman, David S.**, 522.
- Van Vuuren, Cornelius P. J.** See **Du Preez, Jan G. H.**, 1548.
- Vasapollo, Giuseppe.** See **Gargano, Michele**, 9.
- Vasile, Michael J., and Falconer, Warren E.** Vapour transport of dioxygenyl salts, 316.

- Venkatesan, Kailasam. See Bhandary, K. Krishna, 288.
- Vergamini, Phillip J. See Hogenkamp, Henricus P. C., 2628.
- Vichi, Eduardo J. S., and Krumholz, Pawel. Kinetics and mechanism of dissociation of tris(pyridine-2-carbaldehyde-*N*-propylimine)- and tris(pyridine-2-carbaldehyde-*N*-methylimine)-iron(II), 1543.
- Vinter, Jeremy G. See Mason, Joan, 2522.
- Visser, Jacobus P. See Kiffen, Albertus A., 1311.
- W
- Waddington, Thomas C. See Dillon, Keith B., 790, and Symon, David A., 2140.
- Wagner, Burkhard E. See Helbert, John N., 998.
- Wagner, John L. See Alcock, Roland M., 2189, 2194.
- Waite, David W. See Greenwood, Norman N., 299.
- Walker, Robert, and Muir, Kenneth W. Compounds containing platinum-carbon bonds. Part V. Crystal and molecular structure of a carbenoid complex of platinum(IV), $[\text{PtCl}_2(\text{C}(\text{Cl}-\text{C}_6\text{H}_5\text{NH})(\text{NHMe}))(\text{PET}_3)_2]\text{ClO}_4$, 272.
- Wallbridge, Malcolm G. H. See Larkin, Graham A., 2305.
- Wallwork, Stephen C. See Blackwell, Leslie J., 2068.
- Walsh, Peter T. See Lyle, Samuel J., 1406.
- Walters, Michael J. See Adams, John M., 1459.
- Walton, David R. M. See Coles, Brian F., 442.
- Walton, Richard A. See Jaeger, John A., 698.
- Wan, Emma. See Dobbie, Robert C., 2603.
- Wandiga, Shem O. Hydrogen-1 nuclear magnetic resonance evidence for exchange reactions in the antimony(III)-cysteine system and synthesis of antimony(III) compounds of 3,3-dimethylcysteine, toluene-3,4-dithiolate, dicyanoethylene-1,2-dithiolate, and 2,3-bis-(thiosemicarbazono)butane, 1894.
- Wardell, James L. Sulphur-substituted organometallic compounds. Part II. Reaction of vinyltin compounds with arenesulphenyl halides and thiocyanates and some properties and reactions of the (2-arylthio-1-halogenoethyl)triphenyltin addition products, 1786.
- Warren, Robert F. See Bagnall, Kenneth W., 140.
- Wasif, Saad, and Salama, S. B. Weak complexes of sulphur and selenium. Part IV. Complex of selenium dioxide and seleninyl dichloride with halide ions, 2239.
- Wasif, Saad. See Salama, S. B., 151.
- Waters, Joyce M. See Clark, George R., 463, 2233, 2556.
- Waters, T. Neil. See Bowmaker, Graham A., 867, and Braithwaite, Andrew C., 1817, 2149.
- Waters, William A. See Mulvey, (Mrs.) Denise, 951.
- Watkiss, Philip J. See Donaldson, John D., 1980.
- Watts, Richard O'B. See Haszeldine, Robert N., 1431.
- Way, G. Martin. See Brown, Michael P., 148.
- Wazeer, Mohamed I. M. See Clare, Philip, 625, and Harris, Robin K., 61.
- Webster, David E. See Chipperfield, John R., 2042, 2048, 2051, and Sanders, J. Roger, 1191.
- Webster, Michael. See Buttenshaw, A. Juliet, 2230.
- Wedd, Anthony G. See Anker, Maurice W., 2639.
- Welch, Alan J. Metallaborane chemistry. Part II. Molecular and crystal structure of 1,1-bis(dimethylphenylphosphine)-2,4-dimethyl-2,4-dicarba-1-platino-closo-dodecaborane. Part IV. Molecular and crystal structures of a ten-atom, twenty-two-electron *nido*-metallacarborane: 2,7-dimethyl-9,9-bis(triethylphosphine)-2,7-dicarba-9-platino-*nido*-decaborane(7), 1473, 2270.
- Welch, Alan J. See Carroll, W. Eamon, 2263, and Green, Michael, 179.
- Wells, Peter B. See Sanders, J. Roger, 1191.
- Wernberg, Ole. See Nord, Gwyneth, 845.
- West, Douglas X. See Symons, Martyn C. R., 553, 1696.
- Westland, Alan D. See Gelbman, Peter, 1598.
- Weston, Allan F. See Cragg, R. Harry, 93, 1761.
- Westmore, John B. See Letkeman, Peter, 480.
- Westward, Nicholas P. C. See Barker, Geoffrey K., 1765.
- Wharton, Roland K., Ojo, J. Folorunso, and Sykes, A. Geoffrey. Mechanism of the oxidation of the molybdenum(V)-ethylenediaminetetra-acetate dimer by hexachloroiridate(IV) and tris(1,10-phenanthroline)iron(III), 1526.
- Wharton, Roland K. See Scott, Keith L., 2119.
- Whillans, Francis D. See Hoskins, Bernard F., 657, 1267.
- White, Allan H. See Baker, Joe, 530, Dewan, John C., 490, 546, 2031, Greaney, Terence M., 876, Maslen, Edward N., 327, 400, and Raston, Colin L., 2405, 2410, 2418, 2422, 2425, 2429.
- White, Anthony M. See Gerloch, Malcolm, 2452.
- White, Colin. See Lee, Hing-Bin, 2322.
- Whiteley, R. (Bob) N. See McCleverty, Jon A., 839.
- Whitlow, Simon H., and Davey, Geoffrey. Copper(II) oxydiacetate hemihydrate: crystal structure and twinning, 1228.
- Whittaker, Brian. See Bagnall, Kenneth W., 1249, and Brown, David, 34.
- Whittingham, Andrew C. See Hobdell, Michael R., 1591.
- Whittle, Kenneth R. See Clark, George R., 463, 2233, 2556.
- Wiegardt, Karl. See Hackbusch, Wolfgang, 1015, 2364.
- Wild, Stanley Bruce. See Dewan, John C., 546, and Henrick, Kim, 1506.
- Wilkins, Bernard T. See Lappert, Michael F., 1207.
- Wilkins, Cuthbert J. See Butcher, Raymond J., 1223.
- Wilkins, John D. See Drew, Michael G. B., 1984, 2611.
- Wilkinson, Geoffrey. See Fong, Clifford W., 1100, Gibson, John F., 1093, and Mertis, Konstantinos, 607.
- Wilkinson, James G. See Symons, Martyn C. R., 553, 1696.
- Williams, Alan F., Bhaduri, Sumit, and Maddock, Alfred G. Mössbauer spectroscopy of iridium compounds. Part II. Some iridium(I) complexes, 1958.
- Williams, Alan F., Jones, Geoffrey C. H., and Maddock, Alfred G. Mössbauer spectroscopy of iridium compounds. Part I. Some iridium(III) complexes, 1952.
- Williams, Alan F. See Clark, Michael G., 120.
- Williams, David R. See Baxter, Allan C., 1757, and Corrie, Anna M., 105.
- Williams, Robert J. P. See Cockle, Stephen A., 2633.
- Williamson, David H. See Mertis, Konstantinos, 607.
- Willis, Anthony C. See Raston, Colin L., 2429.
- Willis, Christopher J. See Bramman, Paul F., 45.
- Wilson, Francis B. See Barrow, Michael J., 197.
- Winfield, John M. See Prescott, Ann, 936.
- Winterton, Neil. See Howarth, Oliver W., 360.
- Witts, Alan D. See Lyle, Samuel J., 185, 1406.
- Wong, Yau S. See Taylor, Nicholas J., 438.
- Wood, William J. See Davies, J. Eric D., 674.
- Woods, Michael. See Masood-ul-Hasan, 2202.
- Woodward, Peter. See Bottrill, Martin, 1150, Green, Michael, 2007, Howard, Judith, 59, Howard, Judith A. K.,

- 2332, 2466, Maddren, Paul S., 1272, and Modinos, Anthony, 1516, 1534, 2134.
 Woolf, Alfred A. See Crookes, John V., 2060.
 Woolley, Paul R. Metal-ion assisted catalysis of nucleophilic attack. Part II. The pathway of zinc-base co-operation in aldehyde hydration, 1570.
 Woplin, John R. See Harris, Robin K., 61.
 Wrackmeyer, Bernd. See Kennedy, John D., 386.
 Wright, Peter E. See Bowmaker, Graham A., 867.
 Wu, Shu H. See Long, Gary J., 762.
 Wulfman, David S., Van Thinh, Nguyen, McDaniel, Robert S., Peace, Billy W., Heitsch, Charles W., and Jones, M. Tom (jun.). Metal salt-catalysed carbenoids. Part IX. The catalysts in trialkyl phosphite-copper(I) complex catalysed decomposition of diazomalonic esters in cycloalkenes, 522.

Y

- Yamamoto, Akio. See Ito, Takashi, 1398.
 Yandell, John K. See Maslen, Edward N., 327.
 Yavari, Ahmad. See Larkworthy, Leslie F., 1879.
 Yesinowski, James P. See Bailey, David, 498, and Sheldrick, George M., 870, 873.
 Yin, Candido Choo, and Deeming, Antony J. 2-Pyridyl

complexes derived directly from pyridine and dodecacarbonyl-*triangulo*-triosmium, 2091.

- Yokoi, Hiroshi, and Chikira, Makoto. Electron spin resonance study of dimer formation in some bis(*N*-alkylsalicylideneiminato)copper(II) complexes in inert solvents, 2101.
 Yong, Shim Hian. See Butcher, Raymond J., 1223.
 Youll, Bart. See Greenwood, Norman N., 158.
 Young, Dennis. See Akhmedov, Vagif M., 1412, and Anthony, Martin T., 1419.
 Younger, David. See Dillon, Keith B., 790.
 Yu, Mei Wang, and Fritchie, Charles J. (jun.). Crystal structure of a flavin-metal complex, bis(10-methylisalloxazine)lead(II) perchlorate tetrahydrate, 377.

Z

- Zangrando, Ennio. See Nardin, Giorgio, 2566.
 Zimmerman, Donald N. See Symons, Martyn C. R., 2545.
 Zocchi, Marcello, and Tieghi, Giuseppe. X-Ray diffraction studies on catalysis: crystal structure of di- μ -trifluoroacetato-bis[(2-methylallyl-3-norbornyl)nickel(II)] and comparison with related nickel(II) and palladium(II) complexes, 1740.

INDEX OF SUBJECTS, 1975

A

- Acetylenes** and noble metal compounds. Part XII. Reactions of dimethyl acetylenedicarboxylate with palladium(II) chloride and the structure of one of the products, 125.
- Actinoid(IV)** nitrates, sulphoxide complexes, 1277. tetrakis(pentane-2,4-dionato) complexes, 34.
- Activation** of copper(II) ammine complexes by molecular oxygen for the oxidation of thiosulphate ions, 1329. of saturated hydrocarbons by transition-metal complexes in solution. Part IV. Oxidation of benzene and of alkanes by hexachloroplatinate(IV), 1191.
- Adducts** of bromine, benzene, carbon disulphide, and chlorinated methane with platinum dichloride, 2432. of molybdenum(V) trichloride sulphide, 28. of phthalocyaninatocobalt(II) with pyridine and 4-methylpyridine and their vibrational, magnetic, and electronic properties. Part I. Reactivity towards oxygen, 556.
- Alkali metal and alkaline earth metal cations**, complexes with dibenzo-18-crown-6 in aqueous solution, stability constants, 2381.
- Aluminium** iodate nitrate hexahydrate, crystal structure, 1926. Preparation, characterisation, and crystal and molecular structure of a novel tetrameric aluminium phosphate complex, 1497. Structure, spectra, and reactions of di- μ -(tricarboxyl- η^5 -cyclopentadienyltungsten-*OO'*)bis(dimethylaluminium), 2499. Thermochemistry of tri(tropolonato)- and tri(4-methyl-tropolonato)-aluminium(III), 1257.
- Anhydrous metal nitrates**, comments on their reactivity, and calculation of the ground state of tetranitratotitanium(IV), 1934.
- Antimony(III)** compounds of 3,3-dimethylcysteine, toluene-3,4-dithiolate, dicyanoethylene-1,2-dithiolate, and 2,3-bis(thiosemicarbazono)butane, 1894. compounds, high-energy photoelectron spectroscopy, 2003. Crystal and molecular structure of bis(isocyanato)-triphenylantimony, 1288. structure of tetrafluoroiodine(V) μ -fluoro-bis[pentafluoroantimonate(V)], 2174. structure of trifluorobis(4-methoxypyridine *N*-oxide)-antimony(III) hydrate, 2295. -121 Mössbauer spectroscopic, ^{121}Sb , study of bis(halogenoacetato)trimethylantimony derivatives, 67.
- Aquation** of penta-ammine(dimethyl sulphoxide)cobalt(III) perchlorate in ethanol-water-perchlorate media, 1706. of tris(1,10-phenanthroline)iron(II) complexes in aqueous solution, volumes of activation, 245. kinetics of the tetra-aqua(2,2'-bipyridyl)chromium(III) ion, 319.
- Aqueous chemistry** of thallium(II). Part II. Kinetics

of reaction of thallium(II) with manganese(II), iron(II), and cobalt(III) ions, 1.

- Arsenic**. Complexes between fluoro(ditertiary arsines) and metal tetrahalides, 1903. Crystal and molecular structure of 1-acetyl-2,3,4-triphenyl-5-(triphenylarsonio)cyclopentadienide, 1284. of μ -chloro-bis[hydroxytriphenylarsenic](1+) dichloroiodate (1-), 1381. of triphenyl(2-acetyl-3,4,5-triphenylcyclopenta-2,4-dienyl)arsonium perchlorate, 1377. Crystal structure of tris(diethyldithiocarbamato)-arsenic(III), 2425. Synthesis, separation into diastereoisomers, and resolution of *o*-phenylenebis(methylphenylarsine) and related studies of the *o*-phenylenediarisine moiety, 1506. triselenide: boiling point relation at elevated pressures, 1589.
- Aryloxysulphur(IV)** fluorides, 218.

B

- Barium**, reaction with nitrogen in liquid sodium, solubility studies, 2082.
- Base decomposition** of decavanadate, 947. hydrolysis and mercury(II)-catalysed aquation of bis(ethylenediamine-*NN'*)(ethylenediamine-*N*)halogenocobalt(III) complexes, 1621.
- Beryllium**. Dimeric bis(nonafluoro-*t*-butoxy)beryllium and some of its co-ordination complexes, 1244.
- Binuclear organometallic compounds**. Part IX. Nuclear magnetic double resonance studies of tin-119 chemical shifts in compounds with transition metal-to-tin bonds, 311. ruthenium complex with a bridging cycloheptatrienyl ligand, 59.
- Bismuth**. Crystal and molecular structure of μ -oxo-bis[perchloratotriphenylbismuth(V)], 1291.
- Bond energies** in dicobalt octacarbonyl and bromo- and chloro-methylidyne tricobalt enneacarbonyls, 2582.
- Bonding studies** of transition-metal complexes. Part II. Helium-I photoelectron spectra of homoleptic d^0 , d^1 , and d^{10} tetrakis(dialkylamides) of transition metals and Group 4B metals, 72.
- Boratrane**, (N-B)-2,8,9-trioxa-5-aza-1-borabicyclo[3.3.3]undecane, photoelectron spectra and bonding, 25.
- Boron**. 2,3- μ -Bis(triphenylphosphine)cuprio-pentaborane(9), -1-methylpentaborane(19), and -4-methylpentaborane(9), 334. Crystal and molecular structure of 1,1-bis(dimethylphenylphosphine)-2,4-dimethyl-2,4-dicarba-1-platino-closo-dodecaborane, 1473. structure of dicarbonyl(1,4-difluoro-2,3,5,6-tetramethyl-1,4-diboracyclohexa-1,5-dienyl)nickel(0), 2466. of potassium tetra-acetateborate, 1232.

Boron (*contd.*)

- Dimethylindium(III), dimethylthallium(III), and methylmercury(II) derivatives of the dodecahydro-*nido*-decaborate(2-) ion, 299.
- E.s.r. of bis(1-phenylborabenzene)cobalt(II), 985.
- Formation of silylcarbaboranes from 1,2-bis(trimethylsilyl)pentaborane(9), 1018.
- Lewis acidity of dodecafluoro-octaborane(12) and tri-fluorophosphine-tris(difluoroboryl)borane (1/1): an n.m.r. study of reactions with trimethylamine, 1373.
- Molecular and crystal structures of 2,7-dimethyl-9,9-bis(triethylphosphine)-2,7-dicarba-9-platina-*nido*-decaborane(7), 2270.
- structures of the Friedel-Crafts acetylation products of (η -cyclopentadienyl)(η -(3)-1,2-dicarbaundecaborane-(11))cobalt, 1938.
- Oxidative-insertion reactions of eleven-atom monocarbon carbaborane species with zerovalent nickel, palladium, and platinum complexes, 2263.
- Polycyclic borazines, 1761.
- Preparation and properties of 2,4,6,8,9,10-hexamethyl-2,4,6,8,9,10-hexaboro-adamantane, 148.
- of 1,3,5-triborapentane derivatives by hydrolysis and methanolysis of related *clos*o-carbaboranes, 2603.
- Reaction of dicarbaundecaborane and metalladicaarbaundecaborane species with zerovalent nickel, palladium, and platinum complexes, 179.
- of some tin(II) and tin(IV) compounds with the dodecahydro-*nido*-decaborate(2-) ion, 158.
- Solution thermochemistry of phosphorus(V) bromide and tetrachlorophosphonium tetrachloroborate and tetrabromoborate, 967.
- Synthesis and properties of some 2-phenyl-1,3,2-oxazaborolans, 93.
- trihalide and phenylboron dihalide systems, redistribution equilibria, 1214.
- Uranium(IV) poly(pyrazol-1-yl) borate complexes, 140.
- X-Ray crystal structure characterization of cyclo-(hexacyanoborane), 1784.
- Bromine.** Crystal and molecular structure of bis(quinoline)bromine perchlorate, 2483.

C

- Cadmium** complexes of *N*-carboxymethyliminobis(ethylenenitrilo-*N,N'*-diacetic acid), kinetic study of dissociation by a polarographic method, 480.
- Crystal structure of *catena*-di- μ -acetylacetonato-cadmium(II), 400.
- of potassium tris(acetylacetonato)cadmate(II) monohydrate, 876.
- Caesium** hexachloro- and hexabromo-rhenate(IV), solubility in water and in mixed aqueous solvents, 100.
- tetrachloroborate, synthesis and thermodynamic functions, 357.
- Carbene** chemistry. Part VI. Preparation and pyrolysis of (1,1-difluoroethyl)silanes, 252. Part VII. Preparation and pyrolysis of 2-chloro-1,1-difluoroethyl-, 1-chloro-1,2,2-trifluoroethyl-, and 1,2-dichloro-1,2-difluoroethyl-trichlorosilanes, 620.
- complexes of manganese containing thiazolidinylidene and benzothiazolidinylidene ligands, 2280.
- (tetracarbonyl)-iron and -osmium complexes containing thiazolidinylidene and related ligands, 939.
- Carbide** clusters in the cobalt subgroup. Part II. Crystallographic characterization of the di- μ_3 -carbonyl-hexa- μ -carbonyl-carbidoundecarbonyl-*polyhedro*-octarhodium, 305.
- Carbon-13** n.m.r. spectra of alkylcorrinoids, selectively enriched with carbon-13, effect of temperature and light, 2628.
- of some carbon-13 monoxide derivatives of platinum(II), 1156.
- n.m.r. study of *trans*-1,2-diaminocyclohexane-*NNN'*-tetra-acetate ion and its diamagnetic metal complexes, 360.
- Catalysis** by nickel(II) complexes, a model, 1352.
- of nucleophilic attack. The pathway of zinc-base co-operation in aldehyde hydration, 1570.
- Catalytic** oligomerisation of butadiene using catalysts derived directly from metal atoms or di(η -arene)titanium compounds, 1412.
- Cerium.** Influence of dissolved nitrogen and carbon on reactions of cerium(III) and cerium(IV) oxides with liquid lithium, 1464.
- Charge distribution** in complexes, 2392.
- an electrochemical study, 2401.
- Chiroptical** properties of the ethylenediaminebis(1,10-phenanthroline)cobalt(III) ion, 369.
- Chloride-exchange** processes on gallium(III) in concentrated aqueous chloride solutions, a ^{35}Cl and ^{-71}Ga magnetic resonance study, 669.
- Chlorine-35** n.q.r. spectroscopy for structural assignments in chlorocyclotriphosphazatrienes, 309.
- Chromium** alkyl- and aryl-(η -cyclopentadienyl)dinitrosyl complexes, 1022.
- carbonyl complexes with 1,3-bis(methylseleno)-2,2-dimethylpropane, 209.
- (II) chemistry. Part IX. Ferromagnetic and anti-ferromagnetic chlorochromates(II), 1879.
- (II) complexes of tris(2-diphenylphosphinoethyl)phosphine and *o*-phenylenebis(dimethylarsine), synthesis and characterization, 461.
- (III) complexes of quadrate symmetry, chemical significance of ligand-field parameters, 650.
- Crystal and molecular structure of μ -(dichlorostannio)-bis(tricarbonyl- π -cyclopentadienylchromium), 230.
- structure and vibrational spectroscopy of hexa-ammine-chromium(III) pentachloromercurate(II), 2591.
- Kinetics of aquation and formation of the tetra-aqua-(2,2'-bipyridyl)chromium(III) ion, 319.
- of reaction between tricarbonyl(η -cyclopentadienyl)-(trimethylstannyl)chromium and iodine, 2048.
- Magnetic susceptibility and magnetization of the ionic ferromagnets dipotassium, dirubidium, and dicaesium tetrachlorochromate(II), 1306.
- (VI) oxidation of thiourea and *NN'*-ethylenethiourea in perchlorate media, 682.
- oxides and chromium metal, reactions with disodium oxide, 2487.
- Oxygen-18 exchange studies on the *trans*(*fac*)-bis(*N*-methyliminodiacetato)chromate(III) anion and *N*-methyliminodiacetic acid, 1921.
- pentacarbonyl complexes of tin(II) bis(β -ketoenolates), 1486.
- (V) perfluoropinarolates, e.s.r. studies, 45.
- Preparation and magnetic properties of some alkali-metal salts of chlorochromate(II) and chlorochromate(III) anions, 1609.

Chromium (contd.)

- (vi), reaction with L-cysteine in perchlorate media, 783.
- Reactions of tricarbonyl(η -hexamethylbenzene)chromium derivatives with nitrosonium and benzenediazonium ions; reversible oxidation *versus* nitrosyl- or arene-azo-complex formation, 2335.
- A single-crystal Raman study of the vibration of the $\text{Cr}(\text{CO})_3$ unit in hexa- and penta-methylbenzenetricarbonylchromium, 969.
- tetra- and penta-carbonyls, complexes with S-substituted 1,2-dimercaptoethane compounds, 1025.
- Tris(morpholinocarbodithioato)chromium(III), crystal structure, 2517.
- Vibrational spectra *ca.* 4000 cm^{-1} of crystalline hexacarbonylchromium, 2353.
- Clathrate** and inclusion compounds. Part III. The i.r. and Raman spectra of some β -quinol (hydroquinone) clathrates, 674.
- Cobaloximes**, electron-transfer reactions: kinetics and mechanisms of the vanadium(II) reduction of diammine-, amminebromo-, and amminechloro-bis(dimethylglyoximate)cobalt(III), 330.
- Cobalt**. Aqueation of penta-ammine (dimethyl sulphoxide)-cobalt(III) perchlorate in ethanol-water-perchlorate media, 1706.
- Base hydrolysis and mercury(II)-catalysed aqueation of bis(ethylenediamine-*NN'*')(ethylenediamine-*N*)halogenocobalt(III) complexes, 1621.
- Bicyclo[2.2.1]hepta-2,5-diene, cyclohexa-1,3-diene, and cyclopentadienyl derivatives of the tricobalt carbon cluster, 1771.
- Some bis(dimethylglyoximate)thiocyanatocobalt(III) complexes, solvent effects on the mode of co-ordination of thiocyanate ion, 742.
- Bond energies in dicobalt octacarbonyl and bromo- and chloro-methylidyne tricobalt enneacarbonyls, 2582.
- Chiroptical properties of the ethylenediaminebis(1,10-phenanthroline)cobalt(III) ion, 369.
- (II) complexes of 3,7-dithianonane-1,9-diamine, 779.
- with some histidine-containing peptides, stability constants, 1045.
- (III) complexes of six fluorinated mercapto- β -diketones, dipole moments, 452.
- complexes with tetrahedrally distorted trigonal bipyramidal co-ordination, crystal structures and semi-empirical molecular orbital study, 1575.
- (III) compounds of carbanions and their reactivity. Part II. Crystal and molecular structure of malonitrilato[propane-1,2-bis(salicylideneiminato)]pyridinecobalt(III), 1105.
- Crystal and molecular structure of π -cyclopentadienyl-[1-hydroxy-2,3,4,5-tetrakis(trifluoromethyl)phosphole-1-oxide]cobalt, 197.
- of di- μ -carbonyl-(carbonyl- π -norbornadienecobaltio)-carbonyl- π -cyclopentadienyliron, 226.
- of di- μ -carbonyl-dicarbonyl[cyclohexyl(diphenyl)phosphine](π -methylcyclopentadienylnickel) cobalt, 337.
- of di- μ -carbonyl-dicarbonyl(π -cyclopentadienylnickel) (tris-*p*-fluorophenylphosphine) cobalt, 340.
- Crystal structure of *trans*-aquaabis(ethylenediamine)-sulphitocobalt(III) perchlorate monohydrate, 327.
- of aqua(2,2':6'',2'':6''',2''''-quaterpyridyl)sulphitocobalt(III) nitrate monohydrate, 323.

- of bromo[tris(2-diphenylphosphinoethyl)phosphine]cobalt(II) hexafluorophosphate, 2360.
- of dichloro[*trans*-2-(2-quinolyl)methylenequinuclidin-3-one]cobalt(II), 96.
- of the ω -isomer of chloro(diethylenetriamine)(ethylenediamine)cobalt(III) dichloride hemihydrate, 2153.
- of tris(dithiocarbamate)cobalt(III), 2429.
- Cyclopentadienylcobalt derivatives of perfluoro-alkane- and -arene-thiolates, 813.
- Dichlorocarbene formation during the reactions of octacarbonyldicobalt with chlorinated hydrocarbons, 1850.
- The effect of temperature and light on the ^{13}C n.m.r. spectra of alkylcorrinoids, selectively enriched with carbon-13, 2628.
- E.s.r. of bis(1-phenylborabenzene)cobalt(II), 985.
- studies on bis(dimethylglyoximate)cobalt(II) and its complexes with pyridine, 1729.
- study of the radiolysis of thallium(I) tetracarbonylcobaltate, 2545.
- Further kinetic studies on the reaction of thiocyanate with the μ -amido- μ -hydroxo-bis[tetra-amminecobalt(III)] complex, 2119.
- Hydrolysis of di- μ -hydroxo-bis[nitrilotriacetatocobaltate(III)] to diaqua[nitrilotriacetatocobalt(III)], and some reactions of the latter with non-metallic substrates in aqueous solution, 704.
- Kinetics of aqueation and base hydrolysis of the macrocyclic complex *trans*-chloro(5,12-dimethyl-1,4,8,11-tetra-azacyclotetradeca-4,11-diene)nitrocobalt(III) perchlorate, 1556.
- of formation and dissociation of binuclear complexes obtained from *trans*-aquaabis(ethylenediamine)sulphitocobalt(III) and cyano-complexes of iron, 1339.
- and mechanism of elimination of chloride from *cis*-chlorobis(ethylenediamine)(glycinato-*N*)cobalt(III) ion: a study of copper(II)-ion catalysis, 897.
- and mechanism of oxidation of diaqua[2,2-difluoro-5,6,12,13-tetramethyl-1,3-dioxo-4,7,11,14-tetra-azab-2-boracyclotetradeca-4,6,11,13-tetraene(1-)-*NN'*-*N''N'''*]cobalt(II) perchlorate, 2329.
- and mechanisms of the vanadium(II) reduction of diammine-, amminebromo-, and amminechloro-bis(dimethylglyoximate)cobalt(III), 330.
- Molecular structures of the Friedel-Crafts acetylation products of (η -cyclopentadienyl)[η -(3)-1,2-dicarbaundecaborane(II)]cobalt, 1938.
- A new dimer μ -formamido-bis[penta-amminecobalt(III)] pentachloride monohydrate, X-ray and kinetic studies of conformation, 603.
- 59 N.m.r. study, ^{59}Co , of μ -carboxylato-di- μ -hydroxo-bis[triameinecobalt(III)] complexes, 2364.
- of some polynuclear cobalt(III) complexes, 1015.
- A novel method for the synthesis of nonacarbonyl-(fluoroalkylcarbon)tricobalt derivatives, 1449.
- (II)-L-ornithinate and -DL-2,3-diaminopropanoate complexes, co-ordination of oxygen in aqueous solution, 2023.
- Oxidation reactions of hydridotetrakis(diethoxyphenylphosphine)cobalt(II) hexafluorophosphate, preparation of cationic hydridocobalt(III) complexes, 2340.
- Paramagnetic ellipsoids and π -bonding in dithiocyanatotetrapyridinecobalt(III), 2452.
- perfluoro-alkane- and -arene-thiolate derivatives, reactions with alkynes, 2283.

Cobalt (contd.)

- Preparation and crystal and molecular structure of [1-chloro-2,2-bis(*p*-chlorophenyl)vinyl]bis(dimethylglyoximate)pyridinecobalt(III), 2124.
- Raman spectroscopic studies and theoretical considerations for mercury bis(tetracarbonylcobaltate), 2598.
- Reaction of $[\text{HFeCo}_3(\text{CO})_{12}]$ with phosphorus donor ligands, 455.
- of tricarbonyl[2-(phenylazo)phenyl-*C'N'*] cobalt and related complexes with hexafluorobut-2-yne, 1651.
- Reactivity of the anion $[\text{Co}(\text{CO})_4(\text{PPh}_3)_2]^-$ towards fluoroaromatic compounds, 1843.
- towards oxygen of adducts of phthalocyaninato-cobalt(II) with pyridine and 4-methylpyridine, 556.
- Reduction of penta-ammine(ligand)cobalt(III) complexes by the *p*-nitrobenzoate radical, a pulse radiolytic study, 2477.
- Resonance Raman excitation profiles of the tetraiso-thiocyanatocobaltate(II) ion, 2027.
- (II). Single crystal vibrational spectrum of hexa-(imidazole) cobalt(II) nitrate, 30.
- Spectrophotometric properties of (*NN'*-1-methylethylenebis(*o*-aminobenzylideneiminato)]cobalt(II) as a probe for solvent structure, 1906.
- Synthesis and properties of dimeric cobalt(III) dithiocarbamate complexes; X-ray structural analysis of pentakis(diethyldithiocarbamate)dibicobalt(III) tetrafluoroborate, 2182.
- The temperature dependence of some physical properties of cobinamides and cobalamins, 2633.
- Thermochemical behaviour of some tetrahedral dihalogenodi(tertiary phosphine)cobalt(II) complexes, 1356.
- (II)-tropolonate complex, tetranuclear, crystal structure, 1898.
- The uncatalysed and mercury(II)- and thallium(III)-catalysed elimination of chloride from the μ -amido- μ -chloro-bis[tetra-amminecobalt(III)] complex, 277.
- Vibrational spectra of ^{15}N -substituted hexa-amminecobalt(III) chloride, 2199.
- Complex formation** between cobalt(II), nickel(II), copper(II), zinc(II), cadmium(II), and silver(I), and some unsaturated derivatives of acetic and iminodiacetic acids, 414.
- Complexes**, diamagnetic, of *trans*-1,2-diaminocyclohexane-*NNN'*-tetra-acetate ion, carbon-13 n.m.r. study, 360.
- of molybdenum(III) with sulphur-donor ligands, 110.
- of nickel(II) perchlorate with polymethylenebis(phenylthiourea) ligands, 286.
- of sulphur bis(*t*-butylimide) with some transition metals, 40.
- Compounds** containing platinum-carbon bonds. Part V. Crystal and molecular structure of a carbenoid complex of platinum(IV), 272.
- Computer-based** method for determining ΔH from digitized spectra: the nickel(II) + chloride system in dimethyl sulphoxide, 344.
- Computerised** approach to detecting oligonuclear complexes in metal ion-ligand solutions, 105.
- Conformational** studies of chelated sulphur- and selenium-containing ligands by n.m.r. Part II. Complexes of 1,3-bis(methylseleno)-2,2-dimethylpropane with chromium, molybdenum, and tungsten carbonyl complexes, 209.
- Co-ordination** compounds of indium. Part XXVIII. Preparation and oxidation of indium(II) derivatives of bidentate organic bases, 1815.

Copper(I) acetate complexes. Part I. Complexes with σ -donor ligands, 637.

- (I) acetylides, reaction with chloro(η -cyclopentadienyl)-bis(triphenylphosphine)ruthenium and *cis*-tricarbonylchlorobis(triphenylphosphine)rhenium, 2311.
- (II) ammine complexes, activation by molecular oxygen for the oxidation of thiosulphate ions, 1329.
- (II)-asparaginate, -histidinate, and -threoninate ternary complexes, structures in aqueous solution, 1757.
- Behaviour of the thiocarbonohydrazidium cation as a ligand. Crystal and molecular structure of dichloro-(1*H*⁺-thiocarbonohydrazidium-*NS*)copper(II) chloride, 2168.
- 2,3- μ -Bis(triphenylphosphine)cuprio-pentaborane(9), -1-methylpentaborane(9), and -4-methylpentaborane(9), 334.
- bonded to various transition metals; preparation, structure, and reactions of some new complexes, 1606.
- (II) complex of *NN'*-bis[2-hydroxy-5-methylphenyl]-phenylmethylene]-4-azaheptane-1,7-diamine, structure, properties, and comparison with the nickel(II) analogue, 691.
- of *NN'*-ethylenebis-(thiophen-2-carbaldimine) and -(pyridine-2-carbaldimine), 2149.
- with some histidine peptides, stability constants, 268.
- with Schiff-base ligands derived from *o*-aminobenzaldehyde, e.s.r. and optical spectral properties, 867.
- of 5-substituted 2-salicylidenebiguanides, magnetic and spectroscopic behaviour, 2436.
- of tetramethyl ethylenediaminetetra-acetate, 1348.
- (II) crystal and molecular structure of bis-[2-(2-aminoethyl)pyridine]di-isothiocyanatocopper(II), 55.
- of aquabis(2,2'-bipyridine)di- μ -hydroxo-sulphatodicopper(II) tetrahydrate, 1267.
- of bis[dimethylbis(1-pyrazolyl)gallato]copper(II) and bis[dimethylbis(3,5-dimethyl-1-pyrazolyl)gallato]-copper(II), 718.
- of μ -chloro-chlorobis[3,4-bis(2-aminoethylthio)toluene]-dicopper(II) diperchlorate, 1817.
- of dinitrato(1,10-phenanthroline)copper(II) and diaquanitrato(1,10-phenanthroline) copper(II) nitrate, 1993.
- of catena- μ -isothiocyanato-(*N'*-pyridylmethylene-*N''*-salicyloylhydrazinato-*NN'O*)copper(II), 2357.
- Crystal structure of aqua(glycyl)-L-tryptophanatocopper(II) dihydrate, 2569.
- of α -nitro- α -*aci*-nitrotolueneatobis(triphenylphosphine)copper(I), 2560.
- E.s.r. study of dimer formation in some bis(*N*-alkylsalicylideneiminato)copper(II) complexes in inert solvents, 2101.
- (II) glycylglycine and L-histidine complexes, interaction with D-penicillamine, e.s.r. and electronic absorption study, 1389.
- Hexakis(imidazole)copper(II) nitrate, crystal and molecular structure, e.s.r. and electronic spectrum, 263.
- (II) and hydrogen ions in complex formation with 4-azaheptane-1,7-diamine, 4,8-diazanonamine, and 4-aza-4-methylheptane-1,7-diamine, 688.
- complex formation with dipeptides with non-coordinating substituent groups, thermodynamics, 2106.
- stereoselective complex formation between them and simple dipeptides, 2302.

Copper (contd.)

- (ii) ions in aqueous solution, complexing with DL-4-amino-3-hydroxybutanoic acid, 1319.
- (ii)-ion catalysis, kinetics and mechanism of elimination of chloride from *cis*-chlorobis(ethylenediamine)-(glycinato-*N*)cobalt(III) ion, 897.
- (ii) ions in complex formation with glycylhistidine, β -alanylhistidine, and histidylglycine, thermodynamics, 2112.
- doped in pentacyanonitrosylferrate(2-) and tetrathiocyanatometallate(II) salts, an e.s.r. study, 1696.
- hydrogen ions, and *NN'*- and *NN*-diethylethylenediamine, stepwise equilibria by flow microcalorimetry, 1036.
- Magnetic properties of polymeric dihalogenodi(nicotinamide)- and dihalogenodi(isonicotinamide)-copper(II) complexes, 1364.
- (ii). Molecular crystal structure of dichloro(*NNN'*-tetraethylethylenediamine)copper(II), 1168.
- Molecular structure of di- μ -[bis(diphenylphosphino)methane]- μ -iodo-di- μ_3 -iodo-*triangulo*-tricopper(II)-0.5 dichloromethane, 2566.
- (ii) nitrate adduct with dinitrogen tetroxide, magnetism, 633.
- (ii) oxydiacetate hemihydrate: crystal structure and twinning, 1228.
- (ii) pyrazinamide complexes, a study of the magnetic properties, 616.
- (ii) pyrazolyl-gallate and -borate complexes, spectroscopic studies, 711.
- Reactions between arylcopper compounds and dinitrophenylmethane, 2560.
- Ternary oxides containing copper in oxidation states I, II, III, and IV, 1061.
- (i)-trialkyl phosphite complex catalysed decomposition of diazomalonate esters in cycloalkanes, 522.
- (ii) water-soluble porphyrins, aggregation of, e.s.r. study, 1523.
- Crystallographic characterization of the di- μ_3 -carbonyl-hexa- μ -carbonyl-carbido-undecacarbonyl-polyhedro-octarhodium, 305.**
 - electron-spectroscopic, and kinetic studies of the sodium montmorillonite-pyridine systems, 1459.
- Crystal and molecular structure of acetatocarbonyl(*N*-*p*-tolylformimidoyl)bis(triphenylphosphine)ruthenium(II), 2556.**
 - of acetylacetatonatobis(η^2 -methylenecyclopropane)rhodium(I), 2007.
 - of 2-acetylpyridine[9-(2-pyridyl)-4,8-diazadec-8-en-1-amine]nickel(II) diperchlorate, 666.
 - of 1-acetyl-2,3,4-triphenyl-5-(triphenylarsonio)cyclopentadienide, 1284.
 - of aquabis(2,2'-bipyridine)di- μ -hydroxo-sulphatodicopper(II) tetrahydrate, 1267.
 - of bis-[2-(2-aminoethyl)pyridine]di-isothiocyanatocopper(II), 55.
 - of bis(8-amino-2-methylquinoline)nitratonickel(II) nitrate, 2494.
 - of 1,1-bis(*t*-butyl isocyanide)-2-trimethylamine-2-carba-1-pallada-*closa*-decaborane-(10), 2263.
 - of bis(dimethylbis(1-pyrazolyl)gallato)copper(II) and bis-[dimethylbis(3,5-dimethyl-1-pyrazolyl)gallato]copper(II), 718.
 - of bis(dimethylbis(pyrazol-1-yl)gallato)nickel(II), 176.
 - of 1,1-bis(dimethylphenylphosphine)-2,4-dimethyl-2,4-dicarba-1-platina-*closa*-dodecaborane, 1473.
 - of bis(isocyanato)triphenylantimony, 1288.
 - of bis(*N*-methyl-*N*-acetylhydroxylamino)dimethyltin(IV), 826.
 - of 2-bis(methyldiphenylphosphine)- and 2-bis(triphenylphosphine)-4,4,6,6-tetrakis(trifluoromethyl)-1,3,5,2-trioxaplatinan, 2134.
 - of bis[*aci*-nitromethyl]benzenato](*NNN'*-tetramethyl-1,2-diaminoethane)nickel(II), 1973.
 - of bis[μ -oxo-oxo(tetramethylethane-1,2-diolato)osmium(VI), a dimeric monoester complex with square-pyramidal co-ordination, 2586.
 - of bis(1-phenylbutane-1,3-dionato)tin(II), 1455.
 - of bis(quinoline)bromine perchlorate, 2483.
 - of *acb*[1,2-bis(trifluoromethyl)-3-acetyl-4-oxopent-1-enyl-*O',O,C'*]-*fdc*{1,4-5, β - η -[bis(trifluoromethyl)ethylene]-oct-4-enyl}iridium(III), 1749.
 - of 1,8-bis(trimethylsilyl)octatrayne, 442.
 - of a carbadibora-allyl nickel complex, 2274.
 - of a carbenoid complex of platinum(IV), 272.
 - of carbonyl(η -cyclopentadienyl)-1-[(1-iminotrifluoroethyl)imino]trifluoroethyl-*N*^W-iron, 1150.
 - of [1-chloro-2,2-bis(*p*-chlorophenyl)vinyl]bis(dimethylglyoximate)pyridinecobalt(III), 2124.
 - of μ -chloro-bis[hydroxytriphenylarsenic](1+) dichloroiodate (1-), 1381.
 - of μ -chloro-chlorobis[3,4-bis(2-aminoethylthio)toluene]dicopper(II) diperchlorate, 1817.
 - of *cis*-chloro(3-chloro-1,1,3,3-tetrafluoropropan-2-one)bis(triphenylphosphine)platinum(II), 2222.
 - of *catena*-(cyclohexanone oximate)trimethyltin, 1950.
 - of π -cyclopentadienyl-[1-hydroxy-2,3,4,5-tetrakis(trifluoromethyl)phosphole-1-oxide]cobalt, 197.
 - of di- μ -bis(cyclopentadienyl)stannyl-bis(tetracarbonyliron), 2097.
 - of 1,3-di-*t*-butyl-2,4-dichlorodiazadiphosphetidine, 259.
 - of di- μ -carbonyl- $\{\mu$ -carbonyl-bis(methyldiphenylphosphine)platino}dicarbonyl(methyldiphenylphosphine)ruthenium(2*Ru*-*Pt*)(*Pt*-*Pt*), 1534.
 - of di- μ -carbonyl-(carbonyl- π -norbornadienecobaltio)-carbonyl- π -cyclopentadienyliron, 226.
 - of di- μ -carbonyl-dicarbonyl[cyclohexyl(diphenyl)phosphine](π -methylcyclopentadienylnickelio)cobalt, 337.
 - of di- μ -carbonyl-dicarbonyl(π -cyclopentadienylnickelio)-(tris-*p*-fluorophenylphosphine)cobalt, 340.
 - of dicarbonylnitrosylbis(triphenylphosphine)osmium(O) perchlorate-dichloromethane, 2233.
 - of di- μ -carbonyl-(tricarboxylcobaltio)carbonyl(π -cyclopentadienyl)iron, 22.
 - of di- μ -chloro-bis{[bis(diphenyl phosphino)ethane]dichlororhenium}-bis(acetonitrile), 698.
 - of *cis*-dichlorobis[methylamino(methoxy)carbene]palladium(II), 2165.
 - of *cis*- and *trans*-dichlorobispyridineplatinum(II), 1656.
 - of dichloromethane-solvated tris(morpholinocarbodithioato)-complexes of chromium(III), manganese(III), and rhodium(III), 2517.
 - of μ -(dichlorostannio)-bis(tricarbonyl- π -cyclopentadienylchromium), 230.
 - of dichloro(*NNN'*-tetraethylethylenediamine)copper(II), 1168.
 - of dichlorotetrakis(dimethyl sulphoxide)ruthenium(II), 2480.

Crystal (contd.)

- of dichloro(1*H*⁺-thiocarbonohydrazidium-*NS*)copper(II) chloride, 2168.
- of dimethylammonium trichlorotris(dimethyl sulphoxide)ruthenate(II), 1006.
- of 2,7-dimethyl-9,9-bis(triethylphosphine)-2,7-dicarba-9-platina-*nido*-decaborane(7), 2270.
- of dinitrato(1,10-phenanthroline)copper(II) and diaquanitrato(1,10-phenanthroline)copper(II) nitrate, 1993.
- of di- μ -sulphido-bis[(*L*-histidinato)oxomolybdenum(V)] sesquihydrate, 1077.
- e.s.r., and electronic spectrum of hexakis(imidazole)-copper(II) nitrate, 263.
- of μ_3 -gallo-tris(tricarbonyl- η^5 -cyclopentadienyltungsten), 1945.
- of hydroxodinitrosylbis(triphenylphosphine)osmium(II) hexafluorophosphate, 463.
- infrared and n.m.r. spectra and reactions of di- μ -(tricarbonyl- η^5 -cyclopentadienyltungsten-*OO'*)bis(dimethylaluminium), 2499.
- of *cis*-(isobutyl isocyanide)di- μ -carbonyl-carbonylbis(π -cyclopentadienyl)di-iron, 982.
- of *catena*- μ -isothiocyanato-(*N'*-pyridylmethylene-*N''*-salicyloylhydrazinato-*NN'O*)copper(II), 2357.
- of the low-spin five-co-ordinate complex chloro[tris-(2-diphenylphosphinoethyl)amine]nickel(II) hexafluorophosphate, 493.
- of malononitrilato[propane-1,2-bis(salicylideneiminato)]pyridinecobalt(III), 1105.
- of a novel tetrameric aluminium phosphate complex $[\{Al(PO_4)(HCl)(C_2H_5OH)_4\}_4]$, 1497.
- of an octahedral iron(III) complex with a sulphur-containing Schiff-base ligand: bis(2-aminoethylthiosalicylideneiminato)iron(III) chloride, 1344.
- of μ -oxo-bis[perchloratotriphenylbismuth(V)], 1291.
- of paramagnetic tri-*t*-butylphosphonium tribromo(tri-*t*-butylphosphine)nickelate(II), 1294.
- of potassium pentachloro- and pentabromo-nitrosyliridate hydrate, 2538
- and properties of ammonium dimolybdate, 1493.
- of quinolinium trichlorodimethylstannate(IV), 2230.
- of some seven-co-ordinate iron(III) derivatives of two '*N*₅' macrocycles, 2507.
- of tetrachlorobis(triphenylphosphine oxide)uranium(IV), 1873.
- of the tetraethylammonium salts of tetrabromo(ethanol)-nitrosylrhene(II) and of acetonitriletetrabromonitrosylrhene(II), 2156.
- of *trans*-tetrakis(aquadibromovanadium(III) bromide dihydrate and the isomorphous chloro-compound, 894.
- *of the tetrakis(diphenylketimine) derivatives of silicon, germanium, and tin, 2469.
- of tetrakis(dithiobenzoato)molybdenum(IV), 2079.
- of tetrakis- μ -(2-methylimidazolyl)-tetrakis(diethylgallium), 1584.
- of tetra(methylsilicon) hexasulphide, 1,3,5,7-tetramethyl-2,4,6,8,9,10-hexathia-1,3,5,7-tetrasiladadamantane, 2063.
- of a tetranuclear cobalt(II)-tropolonate complex, 1898.
- of triaquazinc(II) thiodiglycolate monohydrate, 144.
- of tricarbonyl- η^5 -[1-pentafluorophenyl-2,3,4,5-tetrakis(trifluoromethyl)thiophen]manganese, 197.
- of tri- μ -chloro-bis(dicarbonylbis(trimethyl phosphite)-molybdenum] tetrachloro(dimethyl phosphito)oxomolybdate, 1984.
- of trimeric bis(dithiobenzoato)-nickel(II) and -palladium(II), 2250.
- of μ -trimethylsilylcycloheptatrienylpentacarbonyltrimethylsilyldiruthenium(*Ru-Ru*), 59.
- of triphenyl(2-acetyl-3,4,5-triphenylcyclopenta-2,4-dienyl)arsonium perchlorate, 1377.
- of tris(dimethyl sulphoxide)trinitratoytterbium, 288.
- of *NNN'*-tris[2-(2'-pyridyl)ethyl]ethane-1,2-diamine-nickel(II) perchlorate-nitromethane, 657.
- of two addition products of hexafluorobut-2-yne with palladium(II) β -diketonate rings: *cis*-bis[1,2-bis(trifluoromethyl)-3-acetyl-4-oxopent-1-enyl-*O,C'*] palladium(II) and *ab*-[1,2-bis(trifluoromethyl)-3-acetyl-4-oxopent-1-enyl-*O,C'*]-*cd*-[2-[(dimethylamino)methyl]-phenyl-*C',N'*]palladium(II), 1743.
- of two seven-co-ordinate distorted pentagonal bipyramidal complexes of tantalum(V), 2611.
- of an unbridged dinuclear species with eclipsed carbonyl groups: bis[tetracarbonyl(trimethylstannio)ruthenium]-(*Ru-Ru*), 2332.

Crystal structure of aluminium iodate nitrate hexahydrate, 1926.

- of *trans*-aquabis(ethylenediamine)sulphitocobalt(III) perchlorate monohydrate, 327.
- of aqua[bis(2-hydroxyphenylimino)ethanato-*OO'NN'*] dioxouranium, 612.
- of aqua(glycyl)-*L*-tryptophanato-copper(II) dihydrate, 2569.
- of aqua(2,2':6'',2'':6''',2''':6''''-quaterpyridyl)sulphito-cobalt(III) nitrate monohydrate, 323.
- of (2,2'-bipyridyl)bis(trifluoroacetato)divinyltin, 562.
- of bis(1,4-difluoro-2,3,5,6-tetramethyl-1,4-diboracyclohexa-2,5-diene)nickel(0), 1272.
- of [1,2-bis(diphenylphosphino)ethane]tetracarbonyl(trichlorostannyl)molybdenum(I) aquapentachlorostannate-benzene, 1628.
- of bis[(1,8-naphthyridine)mercury(II)] diperchlorate, 490.
- of bis(tetra-*n*-propylammonium) bis(carbonyldichloroplatinate(I)), 1516.
- and chemical properties of bis(*N*-picolinylidene-*N'*-salicyloylhydrazinato)nickel(II), 295.
- of chlorotrimethyl(triphenylphosphoranylideneacetone)-tin(IV), 1552.
- of complexes between alkali-metal salts and cyclic polyethers. Part IX. Complex formed between dibenzo-24-crown-8 and two molecules of sodium *o*-nitrophenolate, 2374.
- of cyclo(hexacyanoborane), 1784.
- of *L*-cystinato(methyl)mercury(II) monohydrate, 438.
- of *catena*-di- μ -acetylacetonato-cadmium(II), 400.
- of dicarbonyl (1,4-difluoro-2,3,5,6-tetramethyl-1,4-diboracyclohexa-1,5-dienyl)nickel(0), a complex with a ligand analogous to duroquinone, 2466.
- of dichlorobis(*O*-ethyl thiocarbamate)mercury(II), 449.
- of *cis*-dichloro(*meso*-bis(*trans*-2-hydroxycyclohexyl)sulphide-*OO*S)dioxouranium(VI), 2161.
- of dichloro[*trans*-2-(2-quinolyl)methylenequinuclidin-3-one]cobalt(II), 96.
- of di[μ -diethyldithiocarbamate-carbonyldiethyldithiocarbamatoruthenium(II)], 2418.
- of *catena*-di- μ -fluoro-(dimethyl sulphoxide)dioxouranium(VI), 2171.
- of μ -(dimethylarsino)- μ -[1-3- η -(2,3-bis(dimethylarsino)-1,1-difluoro-3-trifluoromethylallyl)(*As, As', C, C', C''*)]bis[tetracarbonylmanganese(I)], 172.

Crystal (contd.)

- of the 1,5 dinitrogen tetroxide solvate of iron(III) nitrate, 2068.
- of (1,3-diphenylpropane-1,3-dionato)triphenyltin(IV), 973.
- of di- μ -trifluoroacetato-bis[(2-methylallyl-3-norbornyl)-nickel(II)], 1740.
- of an eight-co-ordinate manganese complex: bis(3,4-di-2-pyridylpyridazine)dinitratomanganese(II), 800.
- e.s.r., and magnetism of tris(*o*-phenanthroline)iron(III) perchlorate hydrate, 530.
- of a flavin-metal complex, bis(10-methylisalloxazine)-lead(II) perchlorate tetrahydrate, 377.
- of the heptamolybdate(VI) (paramolybdate) ion in the ammonium and potassium tetrahydrate salts, 505.
- of a hydrated complex of sodium iodide with phenacylkojate, 1066.
- of the ω -isomer of chloro(diethylenetriamine)(ethylene-diamine)cobalt(III) dichloride hemihydrate, 2153.
- of the low-spin five-co-ordinate complex bromo[tris(2-diphenylphosphinoethyl)phosphine]cobalt(II) hexafluorophosphate, 2360.
- and mass spectrum of μ_3 -oxo-hexakis(μ -trimethylacetato)-trismethanoltri-iron(III) chloride, 193.
- of methylenebis(phosphonic dichloride), 943.
- of α -nitro- α -*aci*-nitrotoluenatobis(triphenylphosphine)-copper(I), 2560.
- of nonacarbonyl- μ_3 -ethylidyne-tri- μ -hydrido-triruthenium, 873.
- of pentakis(diethyldithiocarbamate)dichlorocobalt(III) tetrafluoroborate, 2182.
- of phenacylkojate monohydrate and comparison with some of its complexes with alkali-metal salts, 1071.
- of polymeric (2-aminobenzothiazolato)nitratotin(II), 1595.
- of potassium tetra-acetatoborate 1232.
- of potassium tris(acetylacetonato)cadmate(II) monohydrate, 876.
- of tetracaesium octa-isothiocyanatouranate(IV) 1520.
- of tetraethylammonium trichloro(triethylphosphine)platinate(II), 572.
- of a tetrahedral zinc(II) complex of a 1,3-dithiolate: bis(*O*-ethyl thioacetothioacetato)zinc(II), 908.
- of tetrafluoroethylenebis(triphenylarsine)platinum(0), 1752.
- of tetrafluoroiodine(V) μ -fluoro-bis[pentafluoroantimonate(V)], 2174.
- of [NN'-tetramethylenebis(thioacetylacetoniminato)-(2-)-zinc, 429.
- of *rac*- and *meso*-tricarbonyldi-iodo[*o*-phenylenebis(methylphenylarsine)]molybdenum(II), 546.
- of 1, *cis*-3, *cis*-5-trichloro-1,3,5,7,7-pentakis(dimethylamino)cyclotetraphosphazene, 2617.
- of trifluorobis(4-methoxypyridine *N*-oxide)antimony(III) hydrate, 2295.
- of a trinuclear ruthenium(II) carbonyl dithiocarbamate chloride, 2422.
- of tris(diethyldithiocarbamate)-rhodium(III) and -arsenic(III), 2425.
- of μ^I , μ^{II} , μ^{III} -tris(dithioacetato)- μ_3 -trithio-orthoacetato-triangulo-trinickel(II) in two crystalline forms, 2594.
- of tris(dithiocarbamate)cobalt(III), 2429.
- of tris(morpholyldithiocarbamate)ruthenium(III)-2,5-chloroform, 2405.
- of tritin(II) dihydroxide oxide sulphate, 2241.

and twinning in copper(II) oxydiacetate hemihydrate, 1228.

of two cobalt complexes with tetrahedrally distorted trigonal bipyramidal co-ordination and semiempirical molecular orbital study of the distortion, 1575.

of two salts of the $[\text{Ru}_2(\text{dte})_2]^+$ cation (dte = dithiocarbamate), 2410.

and vibrational spectroscopy of hexa-amminechromium(III) pentachloromercurate(II), 2591.

Cyclometallation reactions. Part 10. Some reactions of polyfluorinated azobenzenes: metallation by fluorine abstraction, 591.

D

Deuterium incorporation into simple alkenes and into tertiary phosphine complexes of platinum(II), use of ^{13}C n.m.r. spectroscopy, 858.

Diazadiphosphetidines, preparative and n.m.r. studies, chloromethyl compounds, 61.

Dichloromethane-solvated tris(morpholinocarbodithioato)-complexes of chromium(III), manganese(III), and rhodium(III), 2517.

Diels-Alder reactions of the π -cyclopentadienyldicarbonyl-iron derivative of hexafluorobicyclo[2.2.0]hexa-2,5-diene, 1446.

β -Diketones, enthalpies of vaporization, 798.

Dimeric nitrogen oxides. Part I. Electronic absorption of the nitrogen oxide dimer, and comparison of observed and calculated spectra for dinitrogen dioxide, trioxide, and tetraoxide, 19.

Dimethylindium(III), dimethylthallium(III), and methylmercury(II) derivatives of the dodecahydro-*nido*-deca-borate(2-) ion, 299.

Dioxygenyl salts, vapour transport, 316.

Dipole-moment and dielectric-relaxation measurements on some tetrahedral zinc(II) complexes of seven mercapto- β -diketones, 886.

measurements of metal chelates. Part II. Dipole moments of nickel(II), palladium(II), platinum(II), and cobalt(III) complexes of six fluorinated mercapto- β -diketones, 452.

Displacement of chelate ligands from planar four-coordinate complexes. Part II. Preparation and substitution reactions of some dichlorodiaminegold(III) complexes, 188.

E

Electrochemical oxidation and reduction of binary metal carbonyls in aprotic solvents, 879.

study of charge distribution in complexes, 2401.

Electronic absorption of the nitrogen oxide dimer and other dinitrogen oxides, 19.

ground states of the trigonal-prismatic rhenium complexes, tris(*cis*-1,2-diphenylethene-1,2-dithiolato)rhenium, and tris(toluene-3,4-dithiolato)rhenium, 250.

influences on chelate-ring formation. Complexes of chromium and molybdenum tetra- and penta-carbonyls with *S*-substituted 1,2-dimercaptoethane compounds, 1025.

spectra and magnetic properties of complexes of nickel(II) carboxylates with pyridine and related ligands, 233.

Electronic (contd.)

- spectrum, e.s.r., and crystal and molecular structure of hexakis(imidazole)copper(II) nitrate, 263.
- structure and molecular energy levels of complex compounds, semiempirical calculations, 596.
- Electron-transfer** reactions of cobaloximes: kinetics and mechanisms of the vanadium(II) reduction of diamine-, amminebromo-, and amminechloro-bis(dimethylglyoximate)cobalt(III), 330.
- of cobaloximes. Part II. The transition from outer- to inner-sphere mechanisms with vanadium(II): a non-linear free-energy relation, 1245.
- Electrophilic** substitution on metal biguanides and metal amidinouras, 1701.
- Elimination** of chloride from the μ -amido- μ -chloro-bis[tetraamminecobalt(III)] complex, 277.
- Enthalpies** of formation of alkali-metal hexachloro-zincates and -hafnates, 1598.
- and Gibbs energies of formation of some protactinium-(IV) and -(V) halides, 2256.
- of solution of triphenyl derivatives of the Group 5 elements, 1565.
- of vaporization of some β -diketones, 798.
- Enthalpy** determination by a computer based method from digitized spectra: the nickel(II) + chloride system in dimethyl sulphoxide, 344.
- Equilibrium** studies. Complex formation of 4-azaheptane-1,7-diamine, 4,8-diazanonamine, and 4-aza-4-methylheptane-1,7-diamine with copper(II) ions and protons in aqueous solution, 688.
- Electron spin resonance** of bis(1-phenylborabenzene)cobalt(II), 985.
- and electronic absorption spectra of tetramethyloxooxotetrakis(trimethylsilylmethyl)-rhenium(VI), 1093.
- studies of the interaction between copper(II) glycylglycine and L-histidine complexes with D-penicillamine, 1389.
- electronic spectrum, crystal and molecular structure of hexakis(imidazole)copper(II) nitrate, 263.
- magnetism, and crystal structure of tris(o-phenanthroline)iron(III) perchlorate hydrate, 530.
- and optical spectral properties of copper(II) complexes with Schiff-base ligands derived from o-amino-benzaldehyde, 867.
- and Raman spectra of $[\text{ReOF}_6]^-$ and related species in aqueous hydrofluoric acid, 737.
- spectra of rhenium tetrachloride oxide and some of its adducts, 50.
- and structure of dichlorophosphoranyl radicals, 1164.
- studies of bis(η -cyclopentadienyl) compounds of molybdenum and tungsten, 2548.
- on bis(dimethylglyoximate)cobalt(II) and its complexes with pyridine, 1729.
- of γ -irradiated aqueous glasses containing oxyanions, 514.
- of the mechanism of radiation processes in trivalent phosphorus derivatives, 861.
- on some perfluoropinacولات of vanadium(IV) and chromium(V), 45.
- of the aggregation of copper(II) water-soluble porphyrins, 1523.
- of the bonding in potassium hexanitratotriodate(IV), 1384.
- of the co-ordination of copper(II) ions doped in penta-

- cyanonitrosylferrate(2-) and tetrathiocyanatometallate(II) salts, 1696.
- of dimer formation in some bis(N-alkylsalicylidene-iminato)copper(II) complexes in inert solvents, 2101.
- of the radiolysis of thallium(I) tetracarboxylcobaltate, 2545.
- Ethylene**, reaction at the surface of liquid potassium, 2576.
- Europium**(III) diketonates, Mössbauer spectroscopic investigation, 185.
- Tris(2,2,6,6-tetramethylheptane-3,5-dionato)europium(III) and its adducts, fluorescence spectra, 221.
- Exchange** reactions, methyl for halogen, between palladium(II), platinum(II), gold(I), and gold(III) complexes, 1810.

F

- Fast** reactions at planar four-coordinate complexes. Part II. The leaving-group effect in palladium(II) complexes of 3-azapentane-1,5-diamine, 771.
- Ferromagnetic** and antiferromagnetic chlorochromates(II) 1879.
- Fluoride** anion, effect of very strong hydrogen bonding on its nucleophilicity, 2129.
- crystal structures. Part XXIII. catena-Di- μ -fluoro-(dimethyl sulphoxide)dioxouranium(VI), 2171. Part XXIV. Tetrafluoroiodine(V) μ -fluoro-bis[pentafluoroantimonate(V)], 2174. Part XXV. Trifluorobis(4-methoxypyridine N-oxide)antimony(III) hydrate, 2295.
- Fluorine**. Nuclear magnetic shielding of fluorine in the fluorides of the elements, 1426.
- 19 n.m.r. studies of platinum(IV) fluoro-complexes, 1238.
- 19 n.m.r. study of *trans*-influence in trifluoromethylthio-complexes of platinum(II), 990.
- Fluorocarbon** complexes of the transition metals. Part III. Chemistry of tertiary arsine derivatives of tetrakis(trifluoromethyl)rhodacyclopentadiene, 900.
- Fluorophosphoranes** containing the perfluoropinacolyl ring system. Part II. Synthesis and n.m.r. studies, 918.
- Fluxional** behaviour and photoelectron spectra of some σ -cyclopentadienes, 390.
- motion in bis(ethane-1,2-dithiolato)nickel(IV) from nematic-phase p.m.r., 498.
- Force-constant** computations. Part V. Use of force-constant computations as an aid to frequency assignment in hexachlorocyclotriphosphazene, 153.
- Formation** of, and equilibria between some five- and six-coordinate chloro-oxomolybdenum(V) complexes in dichloromethane, 1299.
- of *cis*-di-isothiocyanato[4,6,6-trimethyl-1,9-bis(2-pyridyl)-3,7-diazanon-3-ene]nickel(II), 87, 91.
- of metal heptafluorotungstates(VI) in acetonitrile, 934.
- Frequency** assignment in hexachlorocyclotriphosphazene with force-constant computations as an aid, 153.
- Friedel-Crafts** acetylation products of (η -cyclopentadienyl)-[η -(3)-1,2-dicarbaundecaborane(II)]cobalt and their molecular structures, 1938.

G

- Gadolinium**-hydrogen system, Mössbauer spectroscopic study, 1406.

Gallium. Crystal and molecular structure of bis[dimethylbis(1-pyrazolyl)gallato]copper(II) and bis[dimethylbis(3,5-dimethyl-1-pyrazolyl)gallato]copper(II), 718.
of bis[dimethylbis(pyrazol-1-yl)gallato]nickel(II), 176.
of tetrakis- μ -(2-methylimidazolyl)-tetrakis(diethylgallium), 1584.

Preparation and crystal structure of μ_3 -gallio-tris(tricarbonyl- η^5 -cyclopentadienyltungsten), 1945.

-71 and chlorine-35 magnetic resonance study of chloride-exchange processes on gallium(III) in concentrated aqueous chloride solutions, 669.

Germanium. Chemistry of pentacarbonylmanganese derivatives of germane and methylgermane, 475.
tetrakis(diphenylketimine), crystal and molecular structure, 2469.

Germyl carboxylates, synthesis; interconversion of derivatives of germane using heavy-metal salts, 2342.

Gold(I) and **gold(III)** methyl derivatives, reaction with benzenethiol, 115.

Methyl for halogen exchange reactions between palladium(II), platinum(II), gold(I), and gold(III) complexes, 1810.

Preparation and substitution reactions of dichloro(NNN' - N' -tetramethylethylenediamine)- and dichloro(NNN' - N' -tetraethylethylenediamine)-gold(III) complexes, 188.

Resonance Raman and electronic spectra of different salts of the $[AuBr_4]^-$ ion, 381.

Synthesis, structure, and properties of trichloro- and tribromo-(2,9-dimethyl-1,10-phenanthroline)gold(III), 726.

Group 3 trihalide, trimethyl, and mixed halogenomethyl monomeric species, He(I) photoelectron spectra, 1765.

Group 5 elements, triphenyl derivatives, enthalpies of solution, 1565.

Group VI hexacarbonyls, complexes with Group V ligands containing an olefinic side-chain, 468.

H

Hafnium. Enthalpies of formation of alkali-metal hexachlorohafnates, 1598.

Halide ion complexes with selenium dioxide and seleninyl dichloride, 2239.

Halogen ions in 1:1 complexes with sulphur dioxide, sulphinyl dichloride, and sulphonyl dichloride, 151.

He(I) photoelectron spectra of substituted halogenophosphines, 1207.

Hexafluorobicyclo[2.2.0]hexa-2,5-diene, preparation and reactions of some transition metal derivatives, 1439.

Homogeneous oxidation of olefins with palladium(II) catalysts, kinetic studies, 645.

platinum(II)-catalysed hydrogen-deuterium exchange at a saturated carbon atom, 849.

Hydrido-complexes, paramagnetic, of iron(I) and iron(III), 9.

Hydrocarbon complexes of ruthenium. Part III. Reactions of cycloheptatrienes with ruthenium carbonyl, 731.

Hydrogen-deuterium exchange at a saturated carbon atom in tertiary phosphine complexes of platinum(II), 853.

Nuclear magnetic shielding of hydrogen in the hydrides of the elements, 1422.

reaction with solutions of metals in liquid sodium, 1591.

Hydrogensulphates of silver(I) and some transition-metal cations, 2060.

Hydrolysis and methanolysis of the small *closo*-carboranes 1,5-dicarbapentaborane, 1,6-dicarbahexaborane, and 2,4-dicarbaheptaborane, 2603.

of tetramethyl ethylenediaminetetra-acetate and its copper(II) complexes, 1348.

I

Imine hydrolysis reactions in copper(II) complexes of NN' -ethylenebis(thiophen-2-carbalimine) and -(pyridine-2-carbalimine), 2149.

Indium. Dimethylindium(III) derivatives of the dodecahydro-*nido*-decaborate(2-) ion, 299.

Preparation and oxidation of indium(I) derivatives of bidentate organic bases, 1815.

cis- and trans-Influences in platinum(II) complexes. Crystal structure of tetraethylammonium trichloro(triethylphosphine)platinate(II), 572.

Infrared and Raman spectra of some β -quinol clathrates, 674.

spectra and configurations of some molybdenum(VI) dihalide dioxide complexes, 1223.

Inorganic compounds containing the trifluoroacetate group. Part III. Reactions of bis(trifluoroacetato)divinyltin with N -, O -, or N - and O -donor ligands, 562.

Interactions and reactions in restricted polar media. Binding of cyanide ion to hemin in surfactant-solubilized methanol in benzene, 238.

Interconversion of derivatives of germane using heavy-metal salts: synthesis of germyl carboxylates, 2342.

Intermediates in the reaction of iron(III) with 2-mercaptocarboxylic acids, 1560.

Investigation of the effects of added salts on the rate of hydrolysis of sulphur trioxide-trimethylamine, 2118.

Ion association studies: thermodynamics of formation of monoselenocyanato-complexes of cobalt(II), nickel(II), and cadmium(II), 2236.

pairing of nitrate and chlorate with metal ions in aqueous solution, thermodynamics, 2534.

Iridium(I) π -allylic complexes, insertion reactions with hexafluorobut-2-yne, 1142.

(I) π -allylic complexes, reactions with trifluoroacetonitrile, 1150.

-(I), -(II), and -(III) complexes formed from 2-methoxyphenyl- or 2-hydroxyphenyl-di-*t*-butylphosphine, 1690.

Crystal and molecular structure of *acb*[1,2-bis(trifluoromethyl)-3-acetyl-4-oxopent-1-enyl- O' , O,C']-*fde*[1,4-5, β - η -[bis(trifluoromethyl)ethylene]oct-4-enyl]iridium(III), 1749.

of potassium pentachloro- and pentabromo-nitrosyliridate hydrate, 2538.

dithiocarbamate- and O -alkyl dithiocarbonato-derivatives, 1367.

An e.s.r. study of the bonding in potassium hexanitratotiridate(VI), 1384.

The formation of (η -allyl)- and (η -diene)-pentamethylcyclopentadienyliridium complexes from μ -hydrido-compounds and acyclic dienes, 2316.

Kinetics of addition of dihydrogen to *trans*-carbonylchlorobis(dimethylphenylphosphine)iridium(I) and *trans*-carbonylchlorobis[(2-methoxyphenyl)dimethylphosphine]iridium(I), 765.

Iridium (contd.)

of reactions of some cyclic and acyclic dienes with μ -hydrido-bis-pentamethylcyclopentadienyliridium, 2322.

Mechanism of oxidation of the molybdenum(v)-ethylene-diaminetetra-acetato dimer by hexachloroiridate-(iv), 1526.

-(iii), metallation reactions of *N*-(1-pyridinio)benzamidate and related compounds, 162.

Mössbauer spectroscopy of some iridium(iii) complexes, 1952.

of some iridium(i) complexes, 1958.

Paramagnetic bis(carboxylato)(*p*-tolyl isocyanide)triphenylarsineiridium(ii) complexes, preparation and spectroscopic and magnetic measurements, 2039.

Reaction of tetrafluoroethylene with π -allyliridium(i) complexes, 1128.

Reactivity of the $[\text{Ir}(\text{CO})_2(\text{PPh}_3)_2]^-$ ion towards fluoroaromatic compounds, 1843.

Some reactions of the $[\text{Ir}(\text{CO})_2(\text{PPh}_3)_2]^-$ ion with fluoroolefins and hexafluorobut-2-yne, 1847.

Stereochemistry of formation and reactions of carbonyldichloro(*threo*- α,β -dideuteriophenethyl)bis(triphenylphosphine)iridium, 774.

Iron. Addition of hexafluoroacetone to tricarbonyl(diene)-iron complexes, 1137.

of hexafluoropropene, trifluoroethylene, and chlorotrifluoroethylene to tricarbonyl(diene)iron and to tricarbonyl(*o*-styryldiphenylphosphine)iron, 1118.

of tetrafluoroethylene to tricarbonyl(diene)iron, tricarbonyl(*trans*-cinnamaldehyde)iron, and tricarbonyl(*o*-styryldiphenylphosphine)iron complexes, 1109.

Binding of cyanide ion to hemin in surfactant-solubilized methanol in benzene, 238.

binuclear derivatives, bridged by both carbonyl and alkyl-thio-groups, synthesis and redox properties, 1030.

Carbene(tetracarbonyl)iron complexes containing thiazolidinylidene and related ligands, 939.

Carbon-13 n.m.r. spectra of μ -oxo-bis(disalicylidene-iminatoiron) complexes, 1538.

carbonyl η -cyclopentadienyl compounds, valence-band photoelectron spectra, 2140.

-(iii) compounds, low-spin, magnetic properties, 598.

Conformational study of π -tetracarbonyl(mono-olefin)-iron complexes by i.r. spectra and dipole moment measurements, 1041.

Crystal and molecular structure of bis(2-aminoethylthio-salicylideneiminato)iron(iii) chloride, 1344.

of di- μ -bis(cyclopentadienyl)stannyl-bis(tetracarbonyliron), 2097.

of di- μ -carbonyl-(carbonyl- π -norbornadienecobaltio)-carbonyl- π -cyclopentadienyliron, 226.

of di- μ -carbonyl-(tricarbonylcobaltio)carbonyl(π -cyclopentadienyl)iron, 22.

of *cis*-(isobutyl isocyanide)di- μ -carbonyl-carbonylbis(π -cyclopentadienyl)di-iron, 982.

Crystal structure, e.s.r., and magnetism of tris(*o*-phenanthroline)iron(iii) perchlorate hydrate, 530.

and mass spectrum of μ_3 -oxo-hexakis(μ -trimethylacetato)-trismethanoltri-iron(iii) chloride, 193.

Diels-Alder reactions of the π -cyclopentadienyldicarbonyliron derivative of hexafluorobicyclo[2.2.0]-hexa-2,5-diene, 1446.

fluoride hydrates, mixed valent, and their thermal decomposition products, 978.

Halogenoethylene complexes of tetracarbonyliron and the reaction of nonacarbonyldi-iron with iodotrifluoroethylene, 1867.

The interaction of tin(ii) halides and bis(β -ketonolates) with di-iron enneacarbonyl, 2017.

-iron bond, mercaptide insertion reactions, 701.

-(i) and iron(iii), paramagnetic hydrido-complexes, 9.

-(ii) and iron(iii) pentacyanoferrates, kinetic and equilibrium studies, 1530.

Kinetics of formation and dissociation of binuclear complexes obtained from *trans*-aquabis(ethylenediamine)-sulphitocobalt(iii) and cyano-complexes of iron, 1339.

of iodination of dicarbonyl(η -cyclopentadienyl)(trimethylstannyl)iron, 2042.

and mechanism of dissociation of tris(pyridine-2-carbaldehyde-*N*-propylimine)- and tris(pyridine-2-carbaldehyde-*N*-methylimine)-iron(ii), 1543.

and mechanism of oxidation of hypophosphite by hexacyanoferrate(iii) ion in alkaline solution, 1737.

and mechanism of replacements in pentacyano-(ligand)ferrate(ii) ions, 353.

Magnetic cross-over in six-co-ordinate iron(ii) complexes of *cis*-1,2-bis(diphenylphosphino)ethylene, 1778.

and Mössbauer investigations of *NN*-disubstituted bis(dithiocarbamate)iron(ii) complexes, 1969.

Mechanism of oxidation of the molybdenum(v)-ethylene-diaminetetra-acetato dimer by tris(1,10-phenanthroline)iron(iii), 1526.

Mössbauer spectroscopy of hexa-ammineiron(ii) nitrate, thiocyanate, and sulphate, 1235.

-(iii) nitrate, dinitrogen tetroxide solvates, thermal decomposition studied by Mössbauer spectroscopy, 830.

1:5 dinitrogen tetroxide solvate, crystal structure, 2068.

Organonitriles as ligands in low-spin di[1,2-bis(diethylphosphino)ethane]iron complexes, 1281.

Paramagnetic ellipsoids and π -bonding in dithiocyanatotetrapyridineiron(ii), 2452.

perfluoro-alkane- and -arene-thiolate derivatives, reactions with alkynes, 2283.

Preparation of some cyclic ketones using tricarbonyliron complexes in the presence of aluminium trichloride, 567.

Reaction of di- μ -phenylthio-bis(tricarbonyliron)(*Fe-Fe*) with triphenylphosphine, a detailed kinetic and mechanistic study, 911.

of $[\text{HFeCo}_3(\text{CO})_{12}]$ with phosphorus donor ligands, 455.

of trifluoroacetonitrile with dicarbonyl(cyclopentadienyl)methyliron: the crystal structure of carbonyl(η -cyclopentadienyl)-1-[(1-iminotrifluoroethyl)-imino]trifluoroethyl-*N*^o-iron, 1150.

-(iii), reaction with 2-mercaptocarboxylic acids, formation of intermediates, 1560.

-(iii) redox reactions with some α -mercaptocarboxylic acids, rate-determining dimerisations, 1930.

Reduction of alkaline aqueous disodium pentacyanonitrosylferrate(2-) and kinetic features of its colour reaction with thiols, 951.

-(iii) seven-co-ordinate derivatives of two 'N₅' macrocycles, 2507.

Tautomerism in bis[dicarbonyl(η -cyclopentadienyl)iron] and related compounds, 833.

Iron (contd.)

- 57 and tin-119 Mössbauer spectra of compounds involving tin bonded to iron, 424.
- Tricarbonyliron complexes with trimethyl-silyl-, -germyl-, and -stannyl derivatives of cyclo-octatetraene, 256.
- (III) tris(2,2'-bipyridyl) and tris(1,10-phenanthroline) complexes, reduction by hydroxide ion, 845.
- (II) tris(1,10-phenanthroline) complexes, aquation in aqueous solution, volumes of activation, 245.
- Tritylcyclo-octatetraene derivatives of tricarbonyliron and protonation of tricarbonyl(η -tritylcyclo-octatetraene)iron, 1252.
- Isocyanide** complexes of platinum(0), 2305.
- Isotopic** studies by vibrational spectroscopy of the tellurium-carbon bond in diaryltellurium-carbon bond in diaryltellurium dihalides, 43.
- Isotropic** contact shifts, correlation with Taft σ^* values for some pyridine base adducts of nickel(II) bis(*O*-alkyl dithiocarbonates) and bis(β -diketonates), 1917.

K**Kinetic and equilibrium studies on iron(II) and iron(III) pentacyanoferrates, 1530.**

- features of the colour reactions of disodium pentacyanonitrosylferrate(2-) with thiols, 951.
- investigation of the reaction between tungsten and bromine, 767.
- study of the dissociation of cadmium complexes of *N*-carboxymethyliminobis(ethylenenitrilo-*N'**N'*-diacetic acid) by a polarographic method, 480.
- on homogeneous oxidation of olefins with palladium(II) catalysts, 645.
- on the reaction of thiocyanate with the μ -amido- μ -hydroxo-bis[tetra-amminecobalt(III)] complex, 2119.
- Kinetics** of the acid and mercury(II)-ion induced dissociations of some nickel(II) chelate complexes of substituted pyridine ligands in dimethyl sulphoxide solution, 409.
- of addition of dihydrogen to *trans*-carbonylchlorobis(dimethylphenylphosphine)iridium(I) and *trans*-carbonylchlorobis[(2-methoxyphenyl)dimethylphosphine]iridium(I), 765.
- of aquation and base hydrolysis of the macrocyclic complex *trans*-chloro(5,12-dimethyl-1,4,8,11-tetraazacyclotetradeca-4,11-diene)nitrocobalt(III) perchlorate, 1556.
- and formation of the tetra-aqua(2,2'-bipyridyl)chromium(III) ion, 319.
- of penta-amminechlororuthenium(III) dichloride and *cis*-dichlorobis(ethylenediamine)ruthenium(III) chloride hydrate in mixed water-organic solvents, 1324.
- of carbonyl substitution in tetracarbonyl(phosphine)-ruthenium complexes, 1876.
- of the complexing of chloride and thiocyanate to $[\text{Mo}(\text{H}_2\text{O})_6]^{3+}$ and assignment of an S_N2 mechanism, 1048.
- of decomposition of hyperoxovanadium(IV) ions in the presence of vanadium(IV), 2075.
- of the 1:1 equilibrium of thiocyanate with the molybdenum(V) aquo-dimer, 396.
- of formation and dissociation of binuclear complexes obtained from *trans*-aquabis(ethylenediamine)sulphitocobalt(III) and cyano-complexes of iron, 1339.

- of hydrolysis of di- μ -hydroxo-bis[nitrilotriacetatocobaltate(III)] to diaqua(nitrilotriacetato)cobalt(III), and some reactions of the latter with non-metallic substrates in aqueous solution, 704.
- of some dihalogenotin(IV) β -diketonates, 1471.
- of interaction of nickel(II) with some purine bases and nucleosides, 1977.
- of iodination of tricarbonyl(η -cyclopentadienyl)(trimethylstannyl)-molybdenum and -tungsten, dicarbonyl(η -cyclopentadienyl)(trimethylstannyl)iron, and pentacarbonyl(trimethylstannyl)manganese, 2042.
- and mechanism of dissociation of tris(pyridine-2-carbaldehyde-*N*-propylimine)- and tris(pyridine-2-carbaldehyde-*N*-methylimine)-iron(II), 1543.
- of electron-transfer reactions of aqueous and coordinated thallium(III). Part IX. Stoichiometry and kinetics of reduction of hexa-aquathallium(III) by hydroxylamine, 77.
- of electron-transfer reactions of aqueous and coordinated thallium(III). Part XII. Reduction of hexa-aquathallium(III) by hydrazine, 2541.
- of elimination of chloride from *cis*-chlorobis(ethylenediamine)(glycinato-*N*)cobalt(III) ion: a study of copper(II)-ion catalysis, 897.
- of halide-substitution reactions of trichloro-oxobis(triphenylphosphine oxide)molybdenum(V), 1175.
- of nitrite reduction by trichloro-oxobis(triphenylphosphine oxide)molybdenum(V), 1186.
- of oxidation of diaqua[2,2-difluoro-5,6,12,13-tetramethyl-1,3-dioxo-4,7,11,14-tetra-aza-2-boracyclotetradeca-4,6,11,13-tetraene (1-)-*NN'**NN''*']cobalt(II) perchlorate, 2329.
- of oxidation of hypophosphite by hexacyanoferrate(III) ion in alkaline solution, 1737.
- of the oxidation of titanium(III) by aqueous solutions of chlorine, 1203.
- of oxidation of trichloro-oxobis(triphenylphosphine oxide)molybdenum(V) by nitrate in dichloromethane, 1180.
- of replacements in pentacyano(ligand)ferrate(II) ions, 353.
- of substitution on square-planar palladium(II) complexes in mixed aqueous solvents, 1890.
- and mechanistic study of the reaction of di- μ -phenylthio-bis(tricarbonyliron)(*Fe-Fe*) with triphenylphosphine, 911.
- of oxidation of 1,4-dihydroxy-, 1-hydroxy-4-methoxy-, and 1,4-dihydroxy-2-methyl-benzene by thallium(III) in aqueous perchlorate media, 794.
- of formic acid by silver(II) in aqueous perchloric acid solution, 2086.
- of the rapid monomer-dimer equilibration of molybdenum(VI) in aqueous perchloric acid solutions, 500.
- of reaction of thallium(II) with manganese(II), iron(II), and cobalt(III) ions, 1.
- between tricarbonyl(η -cyclopentadienyl)(trimethylstannyl)chromium and iodine, 2048.
- of vanadium(IV) with chlorine in aqueous solutions, 1199.
- of the reactions of some cyclic and acyclic dienes with μ -hydrido-pentamethylcyclopentadienyl-rhodium and -iridium compounds, 2322.
- of reduction of hexa-aquathallium(III) by hydrogen peroxide and induction of the reaction by cerium(IV) and iron(II) ions, 77, 81.

Kinetics (contd.)

of penta-ammine(ligand)cobalt(III) complexes by the *p*-nitrobenzoate radical, a pulse-radiolytic study, 2477.

of ring opening of substituted cyclobutenediones by platinum(0) complexes, 2579.

L

Lanthanoid oxides MO_x with $1.50 \leq x \leq 1.72$, defect fluorite-type structures, 576.

Lead. Crystal structure of bis(10-methylisalloxazine)-lead(II) perchlorate tetrahydrate, 377.

(II)-glycine peptide systems, detection of oligonuclear complexes in solution, 105.

Lewis acidity of dodecafluoro-octaborane(12) and trifluorophosphine-tris(difluoroboryl)borane (1/1): an n.m.r. study of reactions with trimethylamine, 1373.

Ligand-field parameters in chromium(III) complexes of quadrate symmetry, 650.

substitution at five-co-ordinate centres. Reaction of tributylphosphine adducts of bis(*O*-dialkyl dithiophosphato)nickel(II) complexes, 1686.

Liquid-phase metal-centred autoxidation of cyclo-octene promoted by rhodium species, 2440.

Lithium. Influence of dissolved nitrogen and carbon on reactions of cerium(III) and cerium(IV) oxides with liquid lithium, 1464.

liquid, rate of reaction with hydrogen, comparison with sodium and potassium, 1915.

-sodium phase diagram: redetermination of the liquid immiscibility system by resistance measurement, 1490.

M

Magnesium oxide, X-ray emission and photoelectron spectra, and a discussion of bonding based on the unit Mg_4O_4 , 2143.

Magnetic cross-over in six-co-ordinate iron(II) complexes of *cis*-1,2-bis(diphenylphosphino)ethylene, 1778.

and Mössbauer investigations of *NN*-disubstituted bis(dithiocarbamato)iron(II) complexes, 1969.

properties of some alkali-metal salts of chlorochromate(II) and chlorochromate(III) anions, 1609.

of copper(II) pyrazinamide complexes, 616.

of polymeric dihalogenodi(nicotinamide)- and dihalogenodi(isonicotinamide)-copper(II) complexes, 1364.

and electronic spectra of complexes of nickel(II) carboxylates with pyridine and related ligands, 233.

of some low-spin iron(III) compounds, 598.

and structure of bis(diethyldithiocarbamato)manganese(II), 2051.

resonance investigation of complexing and protonation of free radical imidazolin-1-oxyl and imidazolin-1-oxyl 3-oxide ligands, 998.

and spectroscopic behaviour of copper(II) complexes of 5-substituted 2-salicylidenebiguanides, 2436.

susceptibility and magnetization of the ionic ferromagnets dipotassium, dirubidium, and dicaesium tetrachlorochromate(II), 1306.

Magnetism of the dinitrogen tetroxide adduct of copper(II) nitrate, 633.

Manganese aminomethyl complexes, syntheses and properties, 1096.

carbene complexes containing thiazolidinylidene and benzothiazolidinylidene ligands, 2280.

carbonyl diaza-allyl derivatives, 924.

Chemistry of pentacarbonylmanganese derivatives of germane and methylgermane, 475.

Cleavage of decacarbonyldimanganese with a ditertiary arsine and crystal structure of the product, 172.

(II) compounds of *NN*-disubstituted dithiocarbamates, 1726.

Crystal and molecular structure of tricarbonyl- η^4 -[1-pentafluorophenyl-2,3,4,5-tetrakis(trifluoromethyl)-thiophen]manganese, 197.

Crystal structure of bis(3,4-di-2-pyridylpyridazine)di-nitratomanganese(II), 800.

(η -Cycloheptatriene)- and (η -cycloheptatrienyl)-(η -cyclopentadienyl)manganese. Formation of cyclic triene complexes by photochemical displacement of three carbonyl groups from tricarbonyl(η -cyclopentadienyl)manganese, 2387.

Formation of substituted cyclohexadienyl tricarbonylmanganese complexes by nucleophilic addition reactions of functionally substituted (η -arene)tricarbonylmanganese cations, 1683.

Kinetics of iodination of pentacarbonyl(trimethylstannyl)manganese, 2042.

perfluoro-alkane- and -arene-thiolate derivatives, reactions with alkynes, 2283.

Preparation and reactivity of (η -arene)tricarbonylmanganese cations bearing functional substituents, 1677.

Reactions of acetyl- and benzoyl-pentacarbonylmanganese with dicyclopentadiene, 1863.

of methyl- and phenyl-pentacarbonylmanganese with dicyclopentadiene and other dienes, 1856.

Structure and magnetic properties of bis(diethyldithiocarbamato)manganese(II), 2051.

Tris(morpholinocarbodithioato)manganese(III), crystal structure, 2517.

Mass spectral studies of the anhydrous methyl tin nitrates, 393. spectrum and crystal structure of a trinuclear basic iron(III) carboxylate, 193.

Mechanism of the oxidation of the molybdenum(V)-ethylene-diaminetetra-acetato dimer by hexachloroiridate(IV) and tris(1,10-phenanthroline)iron(III), 1526.

Mechanistic studies of reactions of benzenethiol with methyl derivatives of platinum(II) and gold-(I) and -(III), 115.

Mercaptide insertion reactions of an iron-iron bond, 701.

Mercury bis(tetracarbonylcobaltate), Raman spectra and spectroscopic calculations, 2598.

Crystal structure of bis[(1,8-naphthyridine)mercury(I)] diperchlorate, 490.

and properties of dichlorobis(*O*-ethyl thiocarbamate)-mercury(II), 449.

and vibrational spectra of L-cysteinato(methyl)-mercury(II) monohydrate, 438.

and vibrational spectroscopy of hexa-amminechromium(III) pentachloromercurate(II), 2591.

(II)-ion induced dissociation of nickel(II) chelate complexes of substituted pyridine ligands in dimethyl sulphoxide solutions, kinetics, 409.

Methylmercury(II) derivatives of the dodecahydro-nido-decaborate(2-) ion, 299.

Neutron diffraction refinement of the structure of tetra-aquabis[dicyanomercure(II)]zinc(II) nitrate trihydrate, 2072.

- Metal biguanides and metal amidinoureas, electrophilic substitution, 1701.**
- carbonyl chemistry. Part XXI.** A comparison of the reactivities of the anions $[M(CO)_3(PPh_3)_2]^-$ ($M = Co, Rh, \text{ or } Ir$) towards fluoroaromatic compounds, 1843. **Part XXII.** Some reactions of the anions $[M(CO)_2(PPh_3)_2]^-$ ($M = Rh \text{ or } Ir$) with fluoro-olefins and hexafluorobut-2-yne, 1847. **Part XXIII.** Dichlorocarbene formation during the reactions of octacarbonyldicobalt with chlorinated hydrocarbons, 1850. **Part XXIV.** Reactions of methyl- and phenyl-pentacarbonylmanganese with dicyclopentadiene and other dienes, 1856. **Part XXV.** Reactions of acetyl- and benzoyl-pentacarbonylmanganese with dicyclopentadiene, 1863. **Part XXVI.** Preparation, spectroscopic properties, and model of decomposition of some halogenoethylene complexes of tetracarbonyliron, and the reaction of nonacarbonyldi-iron with iodotrifluoroethylene, 1867.
- carbonyl and metal-nitrosyl complexes. Part XVI.** Comparison of the molecular structures of dicarbonyl-(η -cyclopentadienyl)[bis(trifluoromethyl)phosphino]-iron and its oxidation product, 291.
- ion complexes with ligands formed by reaction of amines with aliphatic carbonyl compounds. Part V.** Nickel-(η) β -hydroxyimine complexes formed by reaction of amine complexes with 4-hydroxy-4-methylpentan-2-one, 87.
- ion oxidations in solution. Part XIII.** The reaction of chromium(vi) with L-cysteine in perchlorate media, 783.
- ligand bonding in some vanadium compounds, a study based on X-ray emission data, 1885.**
- nitrido- and oxo-complexes. Part II.** Osmium and ruthenium nitrido-complexes with Group 5 ligands, and their reactions, 417.
- perfluoro-alkane- and -arene-thiolates. Part III.** Cyclopentadienylcobalt derivatives, 813.
- salt-catalysed carbenoids. Part IX.** The catalysts in trialkyl phosphite-copper(i) complex catalysed decomposition of diazomalonic esters in cycloalkanes, 522.
- tetrahalides, complexes with fluoro(ditertiary arsines), 1903.**
- ylide complexes. Part I.** Metallation reactions of *N*-(1-pyridinio)benzamidate and related compounds with palladium(II), platinum(II), rhodium(III), and iridium(III), 162.
- Metallaborane chemistry. Part I.** Oxidative-insertion reactions of dicarbaundecaborane and metalladicarbaundecaborane species with zerovalent nickel, palladium, and platinum complexes, 179. **Part II.** Molecular and crystal structure of 1,1-bis(dimethylphenylphosphine)-2,4-dimethyl-2,4-dicarba-1-platina-*closa*-dodecaborane, 1473. **Part III.** Oxidative-insertion reactions of eleven-atom monocarbon carbaborane species with zerovalent nickel, palladium, and platinum complexes, 2263. **Part IV.** Molecular and crystal structures of a ten-atom, twentytwo-electron *nido*-metallacarbaborane, 2270. **Part V.** Reactions of zerovalent nickel and platinum complexes with *arachno*-5,9- C_2B_7 carbaboranes, 2274.
- Metallation by fluorine abstraction, reactions of polyfluorinated azobenzenes, 591.**
- Mixed-valent iron fluoride hydrates and their thermal decomposition products, 978.**
- Molecular-orbital calculation, *ab initio* self-consistent field, of the ground state of tetranitratotitanium(IV), 1934.**
- structure and properties of silylsulphinylamine, 805.**
- structures of dicarbonyl(η -cyclopentadienyl)[bis(trifluoromethyl)phosphino]iron and its oxidation product, 291.**
- Molybdenum alkyl- and aryl-(η -cyclopentadienyl)dinitrosyl complexes, 1022.**
- (1-3- η -Allyl)dicarbonylmolybdenum(II) complexes and their reactions with some chelating anions, 1999.**
- (v) aquo-dimer, kinetics of the 1:1 equilibrium with thiocyanate, 396.**
- bis(η -cyclopentadienyl) compounds, e.s.r. studies, 2548.**
- carbonyl complexes of 1,3-bis(methylseleno)-2,2-dimethylpropane, 209.**
- (III) complexes with sulphur-donor ligands, 110.**
- Crystal and molecular structure of di- μ -sulphido-bis[(L-histidinato)oxomolybdenum(v)] sesquihydrate, 1077.**
- of tetrakis(dithiobenzoato)molybdenum(IV), 2079.**
- of tri- μ -chloro-bis[dicarbonylbis(trimethyl phosphite)-molybdenum] tetrachloro(dimethyl phosphito)oxomolybdate, 1984.**
- and properties of ammonium dimolybdate, 1493.**
- Crystal structure of the heptamolybdate(VI) ion in the ammonium and potassium tetrahydrate salts, 505.**
- of *rac*- and *meso*-tricarboxyldi-iodo[*o*-phenylenebis-(methylphenylarsine)]molybdenum(II), 546.**
- (vi) dihalide dioxide complexes, i.r. spectra and configurations, 1223.**
- (v)-ethylenediaminetetra-acetato dimer, mechanism of its oxidation by hexachloroiridate(IV) and tris(1,10-phenanthroline)iron(III), 1526.**
- Formation of, and equilibria between some five- and six-coordinate chloro-oxomolybdenum(v) complexes in dichloromethane, 1299.**
- hexafluoride in acetonitrile, oxidation of metals, 936.**
- Interaction of tricarboxyl(η -cyclopentadienyl)molybdenum halides and acetylenes, 2531.**
- Kinetics of the complexing of chloride and thiocyanate to $[Mo(H_2O)_6]^{3+}$ and assignment of an S_N2 mechanism, 1048.**
- of iodination of tricarboxyl(η -cyclopentadienyl)(trimethylstannyl)molybdenum, 2042.**
- and mechanism of halide-substitution reactions of trichloro-oxobis(triphenylphosphine oxide)molybdenum(v), 1175.**
- and mechanism of nitrite reduction by trichloro-oxobis(triphenylphosphine oxide)molybdenum(v), 1186.**
- and mechanism of oxidation of trichloro-oxobis(triphenylphosphine oxide)molybdenum(v) by nitrate in dichloromethane, 1180.**
- Mono- and di-adducts of binuclear molybdenum(II) trifluoroacetates, 1171.**
- (vi) monomer-dimer equilibration in aqueous perchloric acid solution, kinetics, 500.**
- Octacyanomolybdates(v), 2489.**
- pentacarbonyl complexes of tin(II) bis(β -ketoenolates), 1486.**
- Preparation of trichlorotris(tetrahydrofuran)molybdenum(III) and its use in the preparation of complexes of molybdenum-(III) and -(0), 2639.**
- Reactions of bis[1,2-bis(diphenylphosphino)ethane](η -ethylene)molybdenum(0) with some electrophilic reagents and carbon dioxide, 1398.**
- Reactions of bis(diethyldithiocarbamate)oxomolybdenum(IV), 2552.**

Molybdenum (contd.)

- Stereochemistry of seven-co-ordinate complexes containing a tin-molybdenum bond: crystal structure of [1,2-bis(diphenylphosphino)ethane]tetracarbonyl(trichlorostannyl)molybdenum(i) aquapentachlorostannate-benzene, 1628.
- tetra- and penta-carbonyls, complexes with *S*-substituted 1,2-dimercaptoethane compounds, 1025.
- tin and tungsten-tin chlorine-bridged bonds, Mössbauer study, 1216.
- (v) trichloride sulphide, adducts of, 28.
- Vibrational spectra *ca.* 4 000 cm⁻¹ of crystalline hexacarbonylmolybdenum, 2353.
- Mössbauer** and magnetic investigations of *NN*-disubstituted bis(dithiocarbamato)iron(II) complexes, 1969.
- spectra of compounds involving tin bonded to chromium, molybdenum, tungsten, manganese, iron, or cobalt, 424.
- and n.m.r. of some organotin anions, 1087.
- room temperature, of unassociated tin compounds, 1483.
- ¹²⁵Te, of some aryltellurium(II) and -(IV) compounds, 1323.
- ¹²⁵Te, of some mixed oxides of tellurium(IV) and some mixed-valence oxides of tellurium(IV, VI), 2207.
- spectroscopic investigation of some europium(III) diketones, 185.
- study of the gadolinium-hydrogen system, 1406.
- spectroscopy of hexa-ammineiron(II) nitrate, thiocyanate, and sulphate, 1235.
- of iridium compounds. Part I. Some iridium(III) complexes. Part II. Some iridium(I) complexes, 1952, 1958.
- study, antimony-121, of bis(halogenoacetato)trimethyl-antimony derivatives, 67.
- of complexes with chlorine-bridged tin-molybdenum and tin-tungsten bonds, 1216.
- of octacyanotungstate anions, 120.
- of the thermal decomposition of dinitrogen tetroxide solvates of iron(III) nitrate, 830.

N

- Nephelauxetic** effects as a guide to complex formation for uranium(III) and neptunium(III), 1360.
- Neptunium.** Nephelauxetic effects as a guide to complex formation for neptunium(III), 1360.
- Neutron** diffraction refinement of the crystal and molecular structure of tetra-aquabis[dicyanomercuro(II)]zinc(II) nitrate trihydrate, 2072.
- Nickel(II)** bis(*O*-alkyl dithiocarbonates) and bis(β -diketonates), pyridine base adducts, correlation between isotropic contact shifts and Taft σ^* values, 1917.
- carboxylates, complexes with pyridine and related ligands, magnetic properties and electronic spectra, 233.
- chelate complexes of substituted pyridine ligands, kinetics of acid and mercury(II)-ion induced dissociations in dimethyl sulphoxide solutions, 409.
- + chloride system in dimethyl sulphoxide, a new computer-based method for determining ΔH from digitized spectra, 344.
- complex of *NN'*-bis[(2-hydroxy-5-methylphenyl)phenyl-methylene]-4-azaheptane-1,7-diamine, structure, properties, and comparison with the copper(II) analogue, 691.

- complexes with ligands formed by reaction of amines with aliphatic carbonyl compounds, 87, 91.
- complexes obtained by oxidation of nickel(0) complexes with halogenated organic compounds, synthesis and reactivity, 283.
- complexes of six fluorinated mercapto- β -diketones, dipole moments, 452.
- complexes, zerovalent, in reaction with metallaboranes, 179.
- Crystal and molecular structure of 2-acetylpyridine[9-(2-pyridyl)-4,8-diazadec-8-en-1-amine]nickel(II) diperchlorate, 666.
- of bis(8-amino-2-methylquinoline)nitratonickel(II) nitrate, 2494.
- of bis(dimethylbis(pyrazol-1-yl)gallato)nickel(II), 176.
- of bis[(*aci*-nitromethyl)benzenato](*NNN'*-tetramethyl-1,2-diaminoethane)nickel(II), 1973.
- of di- μ -carbonyl-dicarbonyl[cyclohexyl(diphenyl)phosphine] (π -methylcyclopentadienylnickel) cobalt, 337.
- of di- μ -carbonyl-dicarbonyl(π -cyclopentadienylnickel) (tris-*p*-fluorophenylphosphine) cobalt, 340.
- of five-co-ordinate *NNN'*-tris[2-(2'-pyridyl)ethyl]-ethane-1,2-diaminenickel(II) perchlorate-nitromethane, 657.
- of the low-spin five-co-ordinate complex chloro[tris(2-diphenylphosphinoethyl)amine]nickel(II) hexafluorophosphate, 493.
- of trimeric bis(dithiobenzoato)-nickel(II) and -palladium(II), 2250.
- Crystal structure of bis(1,4-difluoro-2,3,5,6-tetramethyl-1,4-diboracyclohexa-2,5-diene)nickel(0), 1272.
- of dicarbonyl(1,4-difluoro-2,3,5,6-tetramethyl-1,4-diboracyclohexa-1,5-dienyl)nickel(0), 2466.
- of μ^I , μ^{II} , μ^{III} -tris(dithioacetato)- μ_3 -trithio-orthoacetato-triangulo-trinickel(II) in two crystalline forms, 2594.
- and chemical properties of bis(*N*-picolinylidene-*N'*-salicyloylhydrazinato)nickel(II), 295.
- Fluxional motion in bis(ethane-1,2-dithiolato)nickel(IV) from nematic-phase p.m.r., 498.
- and hydrogen ions, complex formation with dipeptides containing non-co-ordinating substituent groups, 2106.
- interaction with purine bases and nucleosides, kinetics, 1977.
- ions in complex formation with glycylhistidine, β -alanylhistidine, and histidylglycine, 2112.
- A model for catalysis by nickel(II) complexes, 1352.
- Oxidative addition of aryl halides to tris(triphenylphosphine)nickel(0), 2572.
- perchlorate, complexes with polymethylenebis(phenylthiourea) ligands, 286.
- pyrazolyl-gallate and -borate complexes, spectroscopic studies, 711.
- Reactions of tributylphosphine adducts of bis(*O*-dialkyl dithiophosphato)nickel(II) complexes, 1686.
- Reactions of zerovalent nickel complexes with *arachno*-5,9-C₂B₇ carbaboranes, and the crystal structure of a product carbadibora-allyl nickel complex, 2274.
- Synthesis, crystal and molecular structure of paramagnetic tri-*t*-butylphosphonium tribromo(tri-*t*-butylphosphine)nickelate(II), 1294.
- Ternary oxides containing nickel in oxidation states II, III, and IV, 1055.

Nickel (contd.)

Vibrational spectra of ^{15}N -substituted hexa-ammine-nickel(II) chloride, 2199.

X-Ray diffraction studies on catalysis; crystal structure of di- μ -trifluoroacetato-bis[(2-methylallyl-3-norbornyl)nickel(II)] and comparison with related nickel(II) and palladium(II) complexes, 1740.

Niobium. Octacyano-niobates(III) and -niobates(IV), 2489. pentachloride, 1 : 1 addition complexes with *o*-phenylene-bis(dimethylarsine), structural studies, 2031.

Nitrogen n.m.r. spectroscopy. Part V. Diazirine, diazomethane, and related azo-, diazo-, and tetra-azo-compounds, and an improved absolute scale for nitrogen shielding, 2522.

oxide dimer, electronic absorption, and comparison of observed and calculated spectra for dinitrogen dioxide, trioxide, and tetraoxide, 19.

-phosphorus compounds. Chloromethyl compounds of the type $[(\text{Cl}_2\text{H}_3-x\text{C})\text{F}_2\text{PNMe}]_2$, 61.

Phosphorimidates and related compounds, 12.

Structure and decomposition of [1-methyl-(or phenyl)-3-tris(dimethylamino)phosphoranylideneazirine], 16.

reaction with barium in liquid sodium, 2082.

Nitroxide chemistry. Part IX. Reaction of NN-bis-trifluoromethylamino-oxyl with tetramethylsilane, chloromethylsilanes, and methoxymethylsilanes, 2225.

Nuclear magnetic resonance, ^{13}C spectra of alkylcorrinoids selectively enriched with carbon-13, effect of temperature and light, 2628.

of μ -oxo-bis(disalicylideneiminatoiron) complexes, 1538.

^{13}C , spectroscopy used to determine the position of deuterium incorporation into simple alkenes and into tertiary phosphine complexes of platinum(II), 858.

^{59}Co , study of μ -carboxylato-di- μ -hydroxo-bis[tri-amine-cobalt(III)] complexes, 2364.

cobalt-59, of some polynuclear cobalt(III) complexes, 1015.

evidence for exchange reactions in the antimony(III)-cysteine system and synthesis of antimony(III) compounds of 3,3-dimethylcysteine, toluene-3,4-dithiolate, dicyanoethylene-1,2-dithiolate, and 2,3-bis(thiosemicarbazono)butane, 1894.

^1H and ^{13}C , spectra, anomalous, of some new *N*-aryl-*N'*-aryldiazene complexes of osmium, 2348.

^1H , study of halogen exchange between trimethyltin halides in solution, 2378.

^1H , ^{203}Tl , and ^{205}Tl , and INDOR studies of dimeric dimethylthallium derivatives, 870.

and Mössbauer spectra of some organotin anions, 1087.

^{14}N , study of some diamagnetic covalent metal nitrates, 1315.

^{15}N , an improved absolute scale for nitrogen shielding, 2522.

nematic phase, of bis(ethane-1,2-dithiolato)nickel(IV), 498.

parameters, relationship to structure for cyclotriphosphazatrienes, 625.

shift reagent tris(2,2,6,6-tetramethylheptane-3,5-dionato)-europium(III), conformation studied by fluorescence spectra, 221.

spectroscopy, nematic-phase, investigation of the η -allyl group in (η -allyl)tetracarbonylrhenium, 1264.

studies of fluorophosphoranes containing the perfluoropinacolyl ring system, 918.

of Lewis acid-base interactions. Part II. Correlation between isotropic contact shifts and Taft σ^* values for some pyridine base adducts of nickel(II) bis(*O*-alkyl dithiocarbonates) and bis(β -diketonates), 1917. study of reactions of trimethylamine with dodecafluorooctaborane(12) and trifluorophosphine-tris(difluoroboryl)borane (1/1), 1373.

Novel cleavage product of the reaction of a ditertiary arsine with decacarbonyldimanganese, 172.

Nuclear quadrupole resonance spectroscopy, chlorine-35, for structural assignments in chlorocyclotriphosphazatrienes, 309.

magnetic double resonance studies of tin-119 chemical shifts in compounds with transition metal-to-tin bonds, 311.

shielding of fluorine in the fluorides of the elements, 1426. of hydrogen in the hydrides of the elements, 1422.

spin-spin coupling between tin and other directly bound elements, 386.

O

Optical spectral properties and e.s.r. studies of copper(II) complexes with Schiff-base ligands derived from *o*-aminobenzaldehyde, 867.

Optically active co-ordination compounds. Part XXXVII. Chiroptical properties of the ethylenediaminebis(1,10-phenanthroline)cobalt(III) ion, 369.

Organoboron compounds. Part IX. Synthesis and properties of some 2-phenyl-1,3,2-oxazaborolans, 93. Part X. Polycyclic borazines, 1761.

Organonitriles as ligands in low-spin di[1,2-bis(diethylphosphino)ethane]iron complexes, 1281.

Organonitrogen groups in metal carbonyl complexes. Part VIII. Diaza-allyl derivatives of manganese, 924. Part IX. Amidino-derivatives of some π -cyclopentadienyl compounds, 930.

Organosilicon chemistry. Part XVIII. Some reactions of 1,3-dimethyl-1,3-diphenyl-, 1,1,3,3-tetraphenyl-, and 1,1-dimethyl-3,3-diphenyl-1,3-disilacyclobutane, 1822. Part XIX. Reactions of 1,1,3,3-tetramethyl- and 1,3-dimethyl-1,3-diphenyl-1,3-disilacyclobutane with chlorosilanes in the presence of hexachloroplatinic(IV) acid, tin(IV) chloride, trimethylsilanol, and triphenylsilanol, 1832. Part XX. Further reactions of 1,1,3,3-tetramethyl-, 1,3-dimethyl-1,3-diphenyl-, and 1,1,3,3-tetraphenyl-1,3-disilacyclobutane, 1837.

Osmium. Anomalous ^1H and ^{13}C n.m.r. spectra of some new *N*-aryl-*N'*-aryldiazene complexes, 2348.

Carbene(tetracarbonyl)iron complexes containing thiazolidinylidene and related ligands, 939.

carbonyl complexes, reactions with cyclopentadiene, 1710.

Crystal and molecular structure of bis[μ -oxo-oxo(tetramethylethane-1,2-diolato)osmium(VI)], 2586.

of dicarbonylnitrosylbis(triphenylphosphine)osmium(0) perchlorate-dichloromethane, 2233.

of hydroxodinitrosylbis(triphenylphosphine)osmium(II) hexafluorophosphate, 463.

dithiocarbamate- and *O*-alkyl dithiocarbonato-derivatives, 1367.

nitrido-complexes, 417.

The preparation and the study of fluxional behaviour of some cationic acetylene complexes of osmium, 1990.

Osmium (contd.)

- Products of the pyrolysis of dodecacarbonyl-triangulo-triosmium, 2606.
- 2-Pyridyl complexes derived directly from pyridine and dodecacarbonyl-triangulo-triosmium, 2091.
- Reactions of acetylene, methyl- and phenyl-substituted acetylenes, and ethylene with 1,1,1,1,2,2,2,3,3,3-decacarbonyl-2,3-di- μ -hydrido-triangulo-triosmium, 1614.
- Study of olefin rotation in $[\text{Os}(\text{CO})\text{NO}(\text{C}_2\text{H}_5)(\text{PPh}_3)_2][\text{PF}_6]$, 677.
- (iii) tris(2,2'-bipyridyl) and tris(1,10-phenanthroline) complexes, reduction by hydroxide ion, 845.
- Oxidation** of benzene and of alkanes by hexachloroplatinate(iv), 1191.
- electrochemical, of binary metal carbonyls in aprotic solvents, 879.
- of metals by molybdenum and tungsten hexafluorides in acetonitrile, 936.
- reactions of hydridotetrakis(diethoxyphenylphosphine)-cobalt(II) hexafluorophosphate, preparation of cationic hydridocobalt(III) complexes, 2340.
- of titanium(III) by aqueous solutions of chlorine, kinetics and mechanism, 1203.
- Oxidative addition** of aryl halides to tris(triphenylphosphine)-nickel(0), 2572.
- addition of trimethylstannane to platinum complexes, 497.
- insertion reactions of dicarbaundecaborane and metalladicalcarbaundecaborane species with zerovalent nickel, palladium, and platinum complexes, 179.
- Oxide chemistry.** Part I. Ternary oxides containing nickel in oxidation states II, III, and IV. Part II. Ternary oxides containing copper in oxidation states I, II, III, and IV, 1055, 1061.
- Oxygen-18** exchange studies on the *trans(fac)*-bis(*N*-methyliminodiacetato)chromate(III) anion and *N*-methyliminodiacetic acid, 1921.
- Oxygen**, co-ordination by cobalt(II)-L-ornithinate and -DL-2,3-diaminopropanoate complexes in aqueous solution, 2023.
- Vapour transport of dioxygenyl salts, 316.

P

- Palladium(II)** catalysts for homogeneous oxidation of olefins, kinetic studies, 645.
- (II) complexes of 3-azapentane-1,5-diamine, leaving group effect, 771.
- (II) complexes of six fluorinated mercapto- β -diketones, dipole moments, 452.
- (II) complexes, square-planar, kinetics and mechanism of substitution in mixed aqueous solvents, 1890.
- complexes, zerovalent, in reaction with metallaboranes, 179.
- (II) chloride, reaction with dimethyl acetylenedicarboxylate, 125.
- Crystal and molecular structure of *cis*-dichlorobis[methylamino(methoxy)carbene]palladium(II), 2165.
- of trimeric bis(dithiobenzoato)palladium(II), 2250.
- of two addition products of hexafluorobut-2-yne with palladium(II) β -diketonate rings, 1743.
- Disproportionation of a halogen-bridged complex containing platinum and palladium, 1311.

Investigation of the species formed on dissolving sodium tetrachloropalladate(II) in glacial acetic acid, 2189.

-(II), metallation reactions with *N*-(1-pyridinio)benzamidate and related compounds, 162.

Methyl for halogen exchange reactions between palladium(II), platinum(II), gold(I), and gold(III) complexes, 1810.

Palladium(II)-olefin complexes, stability in glacial acetic acid, 2194.

-(0) phosphine complexes, reaction with acidic solvents, a phosphorus-31 n.m.r. study, 790.

-(II) and platinum(II) complexes with oxazones: isomerization, oxidation, and *ortho*-metallation of the co-ordinated ligands, 1601.

-(0) tertiary phosphine complexes, ^{31}P n.m.r. spectroscopic characterisation and evidence for 14-electron complexes in solution, 1673.

Paramagnetic bis(carboxylato)(*p*-tolyl isocyanide)triphenylarsineiridium(II) complexes, spectroscopic and magnetic measurements, 2039.

ellipsoids and π -bonding in dithiocyanatotetrapyridine-cobalt(II) and -iron(II), 2452.

hydrido-complexes of iron(I) and iron(III), 9.

properties of unsymmetrical transition-metal complexes, 2443.

1,10-Phenanthroline complexes of rhodium(I), 133.

Phosphines, polytertiary, synthesis, and 'mixed' phosphorus-sulphur and phosphorus-nitrogen polydentate ligands, 1011.

substituted, He(I) photoelectron spectra, 1207.

Phosphoranyl and diphosphine radicals, 1395.

Phosphorimidates and related compounds, 12.

Phosphorus. Crystal and molecular structure of 1,3-di-*t*-butyl-2,4-dichlorodiazadiphosphetidine, 259.

Crystal structure of methylenebis(phosphonic dichloride), 943.

of 1,*cis*-3,*cis*-5-trichloro-1,3,5,7,7-pentakis(dimethylamino)cyclotetraphosphazene, 2617.

Cyclic methylphosphazenes, preparation and donor properties, 203.

E.s.r. spectra and structure of dichlorophosphoranyl radicals, 1164.

Frequency assignment in hexachlorocyclotriphosphazene, 153.

-nitrogen compounds. Preparative and n.m.r. studies of diazadiphosphetidines. Part V. Chloromethyl compounds, 61.

Structure and decomposition of [1-methyl-(or phenyl)-3-tris(dimethylamino)phosphoranylidene-triazene], 16.

Part XL. Hydrogen halide-induced deaminolysis of hexakisdimethylaminocyclotriphosphazatriene and the *cis-trans*-isomerisation of halogenodimethylaminocyclotriphosphazatrienes, 588. Part XLI. Reactions of hexachlorocyclotriphosphazatriene with dibenzylamine and benzylamine, 2202. Part XLII. Reactions of *PPP*-triphenylphosphazene with organic acid halides and mononuclear phosphorus halides, 2527.

N.m.r., ^{31}P , spectroscopic characterisation of tertiary phosphine palladium(0) complexes; evidence for 14-electron complexes in solution, 1673.

study of reactions of phosphine complexes of platinum(0) and palladium(0) with acidic solvents, 790.

Phosphorus (contd.)

Preparation and properties of bis(difluorophosphino)- and tris(difluorophosphino)-amine, 889.

Preparation and properties of iodo(trifluoromethyl)-phosphine and exchange reactions of some simple trifluoromethylphosphines, 2368.

Relationships of n.m.r. parameters to structure for cyclo-triphosphazatrienes, 625.

Solution thermochemistry of phosphorus(v) bromide and tetrachlorophosphonium tetrachloroborate and tetrabromoborate, 967.

Synthesis and n.m.r. studies of fluorophosphoranes containing the perfluoropinacetyl ring system, 918.

Triphenylphosphazenylicyclophosphazenes, examples of exo- and endo-cyclic protonations and the relation of these to the conformation of the triphenylphosphazenylic group, 2634.

N-(Triphenylphosphoranylidene)sulphamoyl pseudo-halides. Part I. Preparation of the azide and its reaction with phosphites and thiophosphites, 1221.

trivalent derivatives, e.s.r. studies of the mechanism of radiation processes, 861.

Use of chlorine-35 n.q.r. spectroscopy for structural assignments in chlorocyclo-triphosphazatrienes, 309.

Photochemistry of the charge-transfer complex between ruthenocene and carbon tetrachloride, 432.

Photoelectron spectra and bonding in boratran and some silatrans, 25.

and fluxional behaviour in some σ -cyclopentadienes, 390.

He(I), of homoleptic d^0 , d^1 , d^{10} tetrakis(dialkylamides) of transition metals and Group 4B metals, 72.

He(I), of monomeric Group 3 trihalide, trimethyl, and mixed halogenomethyl species, 1765.

He(I), of substituted phosphines, 1207.

valence-band, of some carbonyl η -cyclopentadienyl iron compounds, 2140.

and X-ray emission from magnesium oxide, 2143.

spectroscopic study of metal trifluorophosphine and hydridotrifluorophosphine complexes, 2054.

spectroscopy, high-energy, of some antimony compounds, 2003.

studies of some bent bis(η -cyclopentadienyl)metal complexes. Part I. Some eighteen-electron systems with hydride, alkyl, olefin, allyl, and carbonyl ligands, 403.

Phthalocyaninatocobalt(II), adducts with pyridine and 4-methylpyridine and their vibrational, magnetic, and electronic properties. Reactivity towards oxygen, 556.

Platinum. Adducts of hexafluoroacetone with peroxobis(methyldiphenylphosphine)platinum(II) and with peroxobis(triphenylphosphine)platinum(II), 2134.

Alkali hexachloroplatinates, Raman spectra at very high pressures, 215.

-(II) carbon-13 monoxide derivatives, ^{13}C n.m.r. spectra, 1156.

-(II)-catalysed homogeneous hydrogen-deuterium exchange at a saturated carbon atom, 849.

-(0) chemistry. Part IX. Reduction of dichlorobis(phosphine)platinum(II) by hydrazine, 1081.

(II) complexes, *cis*- and *trans*-influences, 572.

(0) complexes, ring opening of substituted cyclobutenediones, kinetics, 2579.

(II) complexes of six fluorinated mercapto- β -diketones, dipole moments, 452.

(IV). Crystal and molecular structure of a carbenoid complex of platinum(IV), 272.

of *cis*-chloro(3-chloro-1,1,3,3-tetrafluoropropan-2-one)-bis(triphenylphosphine)platinum(II), 2222.

of di- μ -carbonyl- $\{\mu$ -carbonyl-bis[(methyldiphenylphosphine)platinum(II)]dicarbonyl(methyldiphenylphosphine)ruthenium (2*Ru*-*Pt*)(*Pt*-*Pt*), 1534.

of *cis*- and *trans*-dichlorobispyridineplatinum(II), 1656.

Crystal structure of bis(tetra-*n*-propylammonium) bis-[carbonyldichloroplatinate(II)], 1516.

of tetrafluoroethylenebis(triphenylarsine)platinum(0), 1752.

complexes, zerovalent, in reaction with metallaboranes, 179.

-(II) cyclopentadienyl cyclo-enyl complexes, 1197.

dichloride adducts with bromine, benzene, carbon disulphide, and chlorinated methane, 2432.

Disproportionation of a halogen-bridged complex containing platinum and palladium, 1311.

-(IV) fluoro-complexes, ^{19}F n.m.r. studies, 1238.

Interaction of acyl chlorides and triethylsilane catalysed by *cis*-dichlorobis(triphenylphosphine)platinum(II) and related complexes, 2646.

-(O) isocyanide complexes, 2305.

metal η^2 -bonded methylenecyclopropane complexes, 2007.

perfluorocarboxylato-derivatives, 370.

metals, fluoro-complexes, 1159.

-(II), metallation reactions with *N*-(1-pyridinio)benzamidate and related compounds, 162.

-(II) methyl derivatives, reaction with benzenethiol, 115.

Methyl for halogen exchange reactions between palladium(II), platinum(II), gold(I), and gold(III) complexes, 1810.

-(II) and palladium(II) oxazone complexes; isomerization, oxidation, and *ortho*-metallation of the co-ordinated ligands, 1601.

Oxidation of benzene and of alkanes by hexachloroplatinate(IV), 1191.

-(0) phosphine complexes, reactions with acidic solvents, a phosphorus-31 n.m.r. study, 790.

Preparation of silylplatinum complexes by interaction of organosilicon hydrides and carbonatobis(phosphine)-platinum(II) complexes, 2212.

Reactions of 1,1,3,3-tetramethyl-, and 1,3-dimethyl-1,3-diphenyl-1,3-disilacyclobutane with chlorosilanes in the presence of hexachloroplatinic(IV) acid, 1832.

Reactions of zerovalent platinum complexes with *arachno*-5,9- C_2B_7 carbaboranes, 2274.

-silicon, -germanium, and -tin complexes by cleavage of platinum-carbon bonds and by oxidative addition of trimethylstannane to platinum complexes, 497.

Structures of 1,2-dimethyl- and 3-methyl-cyclopropene-bis(triphenylphosphine)platinum(0), 662.

-(II) tertiary phosphine complexes, hydrogen-deuterium exchange at a saturated carbon atom, 853.

-(II) tertiary phosphine complexes, position of deuterium incorporation determined by ^{13}C n.m.r. spectroscopy, 858.

-(II) trifluoromethylthio complexes, measurement of *trans*-influence by fluorine-19 n.m.r. spectroscopy, 990.

-(IV)-tin bonds, formation. Reaction between carbonatobis(phosphine)platinum(II) complexes and triorgano-tin hydrides, 809.

- Polar media**, restricted. Binding of cyanide ion to hemin in surfactant-solubilized methanol in benzene, 238.
- Polymorphism** of sodium and potassium sulphates, a study by vibrational spectroscopy and differential scanning calorimetry, 1912.
- Potassium fluoride**, reactions in glacial acetic acid with chlorocarboxylic acids, amides, and chlorides, 2129.
- liquid, reaction of ethylene at its surface, 2576.
- reaction with hydrogen, 446.
- tetra-acetateborate, crystal structure, 1232.
- Preparation** and donor properties of the cyclic methylphosphazenes, 203.
- properties, and crystal structure of dichlorobis(*O*-ethyl thiocarbamate)mercury(II), 449.
- Protonation** of DL-4-amino-3-hydroxybutanoic acid and its complexing capacity with copper(II) ions in aqueous solution, 1319.
- Proactinium**-(IV) and -(V) halides, enthalpies and Gibbs energies of formation, 2256.
- (IV), tetrakis(1,3-diphenylpropane-1,3-dionato) complexes, preparation and properties, 34.
- (V), trichlorobis(pentane-2,4-dionato) complexes, preparation and properties, 34.
- (V) and uranium(V) tropolonates, 1249.
- Pulse-radiolytic study** of reduction of penta-ammine(ligand)-cobalt(III) complexes by the *p*-nitrobenzoate radical, kinetics, 2477.
- Purines**. Part I. Kinetics of interaction of nickel(II) with some purine bases and nucleosides, 1977.
- Pyrolysis** of trimethylborane. Part I. The preparation and properties of 2,4,6,8,9,10-hexamethyl-2,4,6,8,9,10-hexaboro-adamantane, 148.

R

- Radiation mechanisms**. Part I. Inorganic salts in aqueous solutions: e.s.r. studies of γ -irradiated aqueous glasses containing oxyanions, 514. Part II. E.s.r. studies of the mechanism of radiation processes in trivalent phosphorus derivatives, 861.
- Radicals** in thallos nitrate, 553.
- Radiolysis** of thallium(I) tetracarbonylcobaltate, an e.s.r. study, 2545.
- Raman spectra** of complexes $MI_2[PtCl_6]$ and the relation of symmetry species to pressure-sensitivity, 215.
- and e.s.r. of $[ReOF_6]^-$ and related species in aqueous hydrofluoric acid, 737.
- and theoretical studies of mercury bis(tetracarbonylcobaltate), 2598.
- study of the $Cr(CO)_3$ unit in hexa- and penta-methylbenzenetricarbonylchromium, 969.
- Rate-determining dimerisations** in redox reactions of iron(III) with some α -mercaptocarboxylic acids, 1930.
- of hydrolysis of sulphur trioxide-trimethylamine, investigation of the effects of added salts, 2118.
- of reaction of hydrogen with liquid lithium: comparison with sodium and potassium, 1915.
- Reaction** of $[HFeCo_3(CO)_{12}]$ with phosphorus donor ligands, 455.
- of hydrogen with liquid potassium, 446.
- of tungsten(VI) tetrachloride sulphide and selenide and the analogous bromides with a range of donor molecules, 213.
- of some tin(II) and tin(IV) compounds with the dodecahydro-*nido*-decaborate(2-) ion, 158.
- Reactivity** of co-ordinated ligands. Part XXI. Cyclopentadienyl cyclo-enyl complexes of platinum(II), 1197.
- of co-ordinated ligands. Part XXIII. Preparation of some cyclic ketones using tricarbonyliron complexes in the presence of aluminium trichloride, 567.
- Redistribution equilibria** in phenylboron dihalide and boron trihalide systems, 1214.
- Reduction** of alkaline aqueous disodium pentacyanonitrosylferrate(2-) and kinetic features of its colour reaction with thiols, 951.
- electrochemical, of binary metal carbonyls in aprotic solvents, 879.
- of tris(2,2'-bipyridyl) and tris(1,10-phenanthroline) complexes of iron(III) and osmium(III) by hydroxide ion, 845.
- Resonance Raman** and electronic spectra of different salts of the $[AuBr_4]^-$ ion, 381.
- excitation profiles of the tetrathiothiocyanatocobaltate(II) ion, 2027.
- Rhenium alkyls**, chemistry of, Part I. Synthesis and properties of oxorhenium(VI) methyl and trimethylsilylmethyl compounds, 607.
- alkyls. E.s.r. and electronic absorption spectra of tetramethyloxo- and oxotetrakis(trimethylsilylmethyl)-rhenium(VI), 1093.
- aminomethyl complexes, syntheses and properties, 1096.
- Crystal and molecular structure of di- μ -chloro-bis{[bis(diphenylphosphino)ethane]dichlororhenium}-bis(acetonitrile), 698.
- Electronic ground states of the trigonal-prismatic complexes, tris(*cis*-1,2-diphenylethene-1,2-dithiolato)-rhenium and tris(toluene-3,4-dithiolato)rhenium, 250.
- E.s.r. and Raman spectra of $[ReOF_6]^-$ and related species in aqueous hydrofluoric acid, 737.
- nitrosyl complexes. Crystal and molecular structures of the tetraethylammonium salts of tetrabromo(ethanol)nitrosylrhenate(II) and of acetonitriletetrabromonitrosylrhenate(II), 2156.
- Reactions of copper(I) acetylides with *cis*-tricarbonylchlorobis(triphenylphosphine)rhenium, 2311.
- Solubility of caesium hexachloro- and hexabromorhenate(IV) in water and in mixed aqueous solvents, 100.
- Structural investigation of the η -allyl group in (η -allyl)-tetracarbonylrhenium by nematic-phase n.m.r. spectroscopy, 1264.
- tetrachloride oxide and some of its adducts, e.p.r. spectra, 50.
- Rhodium**. Addition of hexafluoroacetone to η -cyclopentadienyl(diene)rhodium complexes, 1137.
- Chemistry of tertiary arsine derivatives of tetrakis(trifluoromethyl)rhodacyclopentadiene, 900.
- complexed penta-1,4- and *cis*-penta-1,3-dienes, isomerization, 1794.
- complexes as catalysts of the interaction of acyl chlorides and triethylsilane, 2460.
- of Group 4B ligands, 2622.
- of rhodium(I) with 1,10-phenanthroline, 133.
- Crystallographic characterization of the di- μ_3 -carbonyl-hexa- μ -carbonyl-carbidoundecacarbonyl-polyhedro-octarhodium, 305.
- Crystal and molecular structure of acetylacetonatobis(η^2 -methylenecyclopropane)rhodium(I), 2007.

Rhodium (*contd.*)

- crystal structure of tris(diethyldithiocarbamato)rhodium(III), 2425.
- (I), diphenyl dithiophosphato- and dicyclohexyldithiophosphinato-complexes, 541.
- Formation of (η -allyl)- and (η -diene)-pentamethylcyclopentadienylrhodium compounds from μ -hydrido-compounds and acyclic dienes, 2316.
- Kinetics of reaction of some cyclic and acyclic dienes with μ -hydrido-pentamethylcyclopentadienylrhodium compounds, 2322.
- Liquid-phase metal-centred autoxidation of styrene catalysed by rhodium species, 815.
- (III), metallation reactions with *N*-(1-pyridinio)benzamide and related compounds, 162.
- Reactions of the complexes α - and β -[$\text{Rh}(\text{HX})_2$] L = tertiary phosphine or arsine, $\text{X} = \text{Cl}$ or Br , 2218.
- Some reactions of the [$\text{Rh}(\text{CO})_2(\text{PPh}_3)_2$] $^-$ ion with fluoroolefins and hexafluorobut-2-yne, 1847.
- Reactivity of the [$\text{Rh}(\text{CO})_2(\text{PPh}_3)_2$] $^-$ ion towards fluoroaromatic compounds, 1843.
- species promoting the liquid-phase metal-centred autoxidation of cyclo-octene, 2440.
- Stereochemistry of formation and reactions of carbonyl-dichloro(*threo*- α , β -dideuteriophenethyl)bis(triphenylphosphine)rhodium, 774.
- Structure and isomerism of some dihalogenohydridotris(ligand)rhodium(III) complexes, 2215.
- Tris(morpholinocarbodithioato)rhodium(III), crystal and molecular structure, 2517.
- Rubidium** tetrachloroborate, synthesis and thermodynamic functions, 357.
- Ruthenium.** Addition of hexafluoropropene, trifluoroethylene, and chlorotrifluoroethylene to ruthenium complexes, 1118.
- aryazo, aryldi-imide and some isocyanide complexes, 839.
- carbonyl complexes, reactions with cyclopentadiene, 1710.
- (II) carbonyl dithiocarbamate chloride, trinuclear, crystal structure, 2422.
- carbonyl, reactions with cycloheptatrienes, 731.
- Cationic and neutral complexes of ruthenium-(II) and -(III) containing tertiary phosphines or arsines and nitrogen-donor ligands, 2244.
- Crystal and molecular structure of acetatocarbonyl(*N*-*p*-tolylformimidoyl)bis(triphenylphosphine)ruthenium-(II), 2556.
- of di- μ -carbonyl- $\{\mu$ -carbonyl-bis[(methyl)diphenylphosphine]platino $\}$ dicarbonyl(methyl)diphenylphosphine-ruthenium ($2\text{Ru}-\text{Pt}$)($\text{Pt}-\text{Pt}$), 1534.
- of dichlorotetrakis(dimethyl sulphoxide) ruthenium(II), 2480.
- of μ -trimethylsilylcycloheptatrienylpentacarbonyltrimethylsilyldiruthenium($\text{Ru}-\text{Ru}$), 59.
- of an unbridged dinuclear species with eclipsed carbonyl groups: bis[tetracarbonyl(trimethylstannio)ruthenium] ($\text{Ru}-\text{Ru}$), 2332.
- Crystal structure of di[μ -diethyldithiocarbamato-carbonylethyldithiocarbamato]ruthenium(II), 2418.
- of nonacarbonyl- μ_3 -ethylidyne-tri- μ -hydrido-triruthenium, 873.
- of tris(morpholydithiocarbamato)ruthenium(III)—2.5 chloroform, 2405.
- of two salts of the [$\text{Ru}_2(\text{dtc})_6$] $^+$ cation (dtc = dithiocarbamate), 2410.
- cyclic dieny complexes, 1633.

dithiocarbamato- and *O*-alkyl dithiocarbonato-derivatives, 1367.

Formation of penta-ammine(dinitrogen)- and *cis*-tetraamminehydroxynitrosyl-ruthenium from pentaamminenitrosylruthenium and hydroxide ion, 1909.

Kinetics of aquation of penta-amminechlororuthenium-(III) dichloride and *cis*-dichlorobis(ethylenediamine)-ruthenium(III) chloride hydrate in mixed water-organic solvents, 1324.

nitrido-complexes, 417.

Photochemistry of the charge-transfer complex between ruthenocene and carbon tetrachloride, 432.

Preparation, characterization, and crystal and molecular structure of dimethylammonium trichlorotris(dimethyl sulphoxide)ruthenate(II), 1006.

Products of the pyrolysis of dodecacarbonyl-triangulotriruthenium, 2606.

Reactions of (η -allyl)tricarbonylchlororuthenium(II) with hydrogen and unsaturated substrates: catalytic hydrogenation and isomerisation of alkenes, 754.

of bis(trimethylsilyl)- and bis(trimethylgermyl)-tetracarbonylruthenium complexes with azulenes, 1647.

of copper(I) acetylides with chloro(η -cyclopentadienyl)-bis(triphenylphosphine)ruthenium, 2311.

of trimethylsilyl- and trimethylgermyl-carbonylruthenium complexes with cycloheptatrienes, 1641.

Some substitution reactions of tricarbonyl(η -cyclo-octa-1,5-diene)ruthenium, 2288.

Synthesis of dimethylphosphinodithioato-complexes of ruthenium(II) containing bidentate donor ligands, 1260.

and rearrangement reactions of dihalogenotris- and dihalogenotetrakis- (tertiary phosphine)ruthenium(II) compounds, 1663.

Tetracarbonyl(phosphine)ruthenium complexes: synthesis and kinetics of carbonyl substitution, 1876.

S

Selenium. Arsenic triselenide: boiling point relation at elevated pressures, 1589.

dioxide, seleninyl dichloride, complexes with halide ions, 2239.

Semiempirical calculations on the electronic structure and molecular energy levels of complex compounds, 596.

Silatrans, 2,8,9-trioxa-5-aza-1-silabicyclo[3.3.3]undecanes, photoelectron spectra and bonding, 25.

Silicates, layered, surface and intercalate chemistry. Part IV. Crystallographic, electron-spectroscopic, and kinetic studies of the sodium montmorillonite-pyridine system, 1459.

Silicon. Crystal and molecular structure of 1,8-bis(trimethylsilyl)octatetrayne, 442.

of tetra(methylsilicon) hexasulphide, 2063.

Further reactions of 1,1,3,3-tetramethyl-, 1,3-dimethyl-1,3-diphenyl-, and 1,1,3,3-tetraphenyl-1,3-disilacyclobutane, 1837.

Infrared, ultraviolet, and visible spectroscopic studies of benzidine-montmorillonite and related systems, 1802.

Interaction of acyl chlorides and triethylsilane catalysed by *cis*-dichlorobis(triphenylphosphine)platinum(II) and related complexes, 2646.

Silicon (*contd.*)

- of acyl chlorides and triethylsilane catalysed by rhodium complexes, 2460.
- perfluoroalkyl derivatives. Part XIII. Preparation and pyrolysis of trifluoro(halogenovinyl)silanes and (1-fluoro-2-halogenoethyl)trihalogenosilanes, 2177.
- Part XIV. Reaction of trichlorosilane with 1,3,3,3-tetrafluoropropene and 2-chloro-1,3,3,3-tetrafluoropropene, 2292.
- Preparation, properties and molecular structure of silylsulphinylamine, 805.
- Preparation and pyrolysis of (1,1-difluoroethyl)silanes, 252.
- of silylplatinum complexes by interaction of organosilicon hydrides and carbonatobis(phosphine)-platinum(II) complexes, 2212.
- Reaction of *NN*-bistrifluoromethylamino-oxyl with tetramethylsilane, chloromethylsilanes, and methoxymethylsilanes, 2225.
- Reactions of 1,1,3,3-tetramethyl- and 1,3-dimethyl-1,3-diphenyl-1,3-disilacyclobutane with chlorosilanes, in the presence of hexachloroplatinic(IV) acids, tin(IV) chloride, trimethylsilanol, and triphenylsilanol, 1832.
- Some reactions of 1,3-dimethyl-1,3-diphenyl-, 1,1,3,3-tetraphenyl-, and 1,1-dimethyl-3,3-diphenyl-1,3-disilacyclobutane, 1822.
- Some reactions of 1,1,3,3-tetramethyl-1,3-disilacyclobutane, 1434.
- tetrakis(diphenylketimine), crystal and molecular structure, 2469.
- Thermal reactions of trifluoro(1,1,2,2-tetrafluoroethyl)silane and silicon tetrafluoride with methoxotrimethylsilane, hexamethyldisilazane, and trimethylsilanol, 1431.
- Silver** bonded to various transition metals; preparation, structure, and reactions of some new complexes, 1606.
- (i) co-ordination to olefinic bonds in some unsaturated derivatives of acetic and iminodiacetic acids, 414.
- (i) hydrogensulphate, 2060.
- (i) ions, formation constants for complexes with dicarboxylic acids of sulphur, selenium, and tellurium, 2297.
- (ii) oxidation of formic acid in aqueous perchloric acid, kinetics, 2086.
- Silylcarboranes** formed from 1,2-bis(trimethylsilyl)pentaborane(9), 1018.
- Silyl** compounds, reaction with tin(IV) chloride, 1624.
- Single-crystal** vibrational spectrum of hexa(imidazole)cobalt(II) nitrate, 30.
- Sodium.** Crystal structure of a hydrated complex of sodium iodide with phenacylkojate, 1066.
- liquid, reaction of hydrogen with solutions of metals, 1591.
- solubility studies of the reaction of barium with nitrogen, 2082.
- lithium phase diagram: redetermination of the liquid immiscibility system by resistance measurement, 1490.
- o*-nitrophenolate, complex with dibenzo-24-crown-8, crystal structure, 2374.
- Reactions of chromium oxides and chromium metal with disodium oxide, 2487.
- Solid-state** effects and the vibrational spectra of hexahalo-stannates(IV) and -tellurates(IV), 1980.

- and solution conformation of a new cobalt dimer μ -formamido-bis[penta-amminecobalt(III)] pentachloride monohydrate: *X*-ray and kinetic studies, 603.
- studies. Part VII. A single-crystal Raman study of the vibration of the $\text{Cr}(\text{CO})_6$ unit in hexa- and pentamethylbenzenetricarbonylchromium, 969.
- vibrational spectroscopy. Part IV. A vibrational and differential scanning calorimetry study of the polymorphism of sodium and potassium sulphates, 1912.
- Solubility** of caesium hexachloro- and hexabromo-rhenate(IV) in water and in mixed aqueous solvents, 100.
- Solution** thermochemistry of phosphorus(V) bromide and tetrachlorophosphonium tetrachloroborate and tetrabromoborate, 967.
- Solvent** effects on the mode of co-ordination of the thiocyanate ion: a study on some bis(dimethylglyoximate)-thiocyanatocobalt(III) complexes, 742.
- structure, neutral transition-metal complexes as probes for. Properties of [*NN'*-1-methylethylenebis(*o*-aminobenzylideneiminato)] cobalt(II) in some pure and mixed solvents, 1906.
- Spectroscopic** and magnetic behaviour of copper(II) complexes of 5-substituted 2-salicylidenebiguanides, 2436.
- properties of halogenoethylene complexes of tetracarbonyliron, 1867.
- studies of benzidine-montmorillonite and related systems, 1802.
- of five-co-ordinate β -diketonatotriorganotin compounds and crystal structure of (1,3-diphenylpropane-1,3-dionato)triphenyltin(IV), 973.
- of inorganic fluoro-complexes. Part IV. Fluorine-19 n.m.r. studies of platinum(IV) fluoro-complexes, 1238.
- of metal carbonyl complexes. Part I. Theoretical considerations and application to mercury bis-(tetracarbonylcobaltate), 2598.
- Spectroscopy** at very high pressures. Part III. Raman spectra of complexes $\text{M}^2_2[\text{PtCl}_6]$ and the relation of symmetry species to pressure-sensitivity, 215.
- Stability constants** of complexes of copper(II) ions with some histidine peptides, 268.
- of complexes of a series of metal cations with dibenzo-18-crown-6 in aqueous solutions, 2381.
- of complexes of zinc and cobalt(II) ions with some histidine-containing peptides, 1045.
- Stereochemistry** of five-co-ordination. Part IV. Compounds of stoichiometry (bidentate ligand)tris(unidentate ligand) metal, 959.
- of formation and reactions of carbonyldichloro(*threo*- α,β -dideuteriophenethyl)bis(triphenylphosphine)-rhodium and -iridium complexes, 774.
- of the iron atom in $[\text{Fe}(\text{CO})_5(\eta\text{-C}_5\text{H}_5)\text{Y}]$ compounds and its application to the tautomerism in bis(dicarbonyl(η -cyclopentadienyl)iron) and related compounds, 833.
- of phosphorus compounds. Part II. Crystal and molecular structure of 1,3-di-*t*-butyl-2,4-dichlorodiaza-diphosphetidine, 259.
- of seven-co-ordinate compounds bis(bidentate ligand)tris(unidentate ligand)metal, 963.
- of seven-co-ordination: crystal structures of *rac*- and *meso*-tricarbonyldi-iodo[*o*-phenylenebis(methylphenylarsine)]molybdenum(II), 546.
- Stereoselective** complex formation between simple dipeptides and hydrogen and copper(II) ions, 2302.

- Structural investigation** of the η -allyl group in (η -allyl)-tetracarbonylrhenium by nematic-phase n.m.r. spectroscopy, 1264.
- studies of the 1:1 addition complexes of niobium and tantalum pentachlorides with *o*-phenylenebis(dimethylarsine), 2031.
- theory for non-stoichiometry. Part II. Defect fluorite-type structures: lanthanoid oxides MO_x with $1.50 \leq x \leq 1.72$, 576.
- Structure** of {[chloro(methoxycarbonyl)(1,2,3,4,5-pentakis-methoxycarbonylcyclopenta-2,4-dienyl)-2-MeOCO]-methyl}(pentane-2,4-dionato)palladium(II), 125.
- and decomposition of a Staudinger reaction intermediate [1-methyl- (or phenyl)- 3-tris(dimethylamino)phosphoranylidenetriazene], 16.
- and isomerism of some dihalogenohydridotris(ligand)-rhodium(III) complexes, 2215.
- and magnetic properties of bis(diethyldithiocarbamato)-manganese(II), 2051.
- and properties of trichloro- and tribromo-(2,9-dimethyl-1,10-phenanthroline)gold(III), 726.
- and properties of the copper(II) and nickel(II) complexes of *NN'*-bis[(2-hydroxy-5-methylphenyl)phenylmethylene]-4-azaheptane-1,7-diamine and related compounds: direct comparison of d^8 and d^9 analogues, 691.
- of the 3:2 reaction product between copper iodide and bis(diphenylphosphino)methane, 2566.
- of caesium tin(II) bromides and of related antimony and tellurium compounds, effects of valence-shell non-bonding electron pairs, 1500.
- of 1,2-dimethyl- and 3-methyl-cyclopropenebis(triphenylphosphine)platinum(0), 662.
- Studies** of the conformations of the n.m.r. shift reagent tris-(2,2,6,6-tetramethylheptane-3,5-dionato)europium(III) and its adducts by means of fluorescence spectra, 221.
- Substitution** reactions of dichloro[*NNN'*-tetramethyl (and tetraethyl)ethylenediamine]gold(III) complexes, 188.
- Sulphamates**, of metals, and their complexes with diamines and pyridine. Evidence for ambidentate behaviour and linkage isomerism of the sulphamate group, 1478.
- Sulphoxide** complexes of the actinoid(IV) nitrates, 1277.
- Sulphur**. Aryloxysulphur(IV) fluorides, 218.
- bis(*t*-butylimide) complexes with some transition metals, 40.
- Crystal and molecular structure of tetra(methylsilicon) hexasulphide, 2063.
- dioxide, sulphuryl dichloride, and sulphonyl dichloride, 1:1 complexes with halogen ions, 151.
- ligands, metal complexes. Part IX. Synthesis of dimethylphosphinodithioato-complexes of ruthenium(II) containing bidentate donor ligands, 1260.
- nitrogen anions: formation from azide ion and elemental sulphur and their role in the synthesis of cyclic sulphur imides, 1715.
- substituted organometallic compounds. Part II. Reaction of vinyltin compounds with arenesulphenyl halides and thiocyanates and some properties and reactions of the (2-arylthio-1-halogenoethyl)triphenyltin addition products, 1786.
- trioxide-trimethylamine, rate of hydrolysis, effects of added salts, 2118.
- Surface** and intercalate chemistry of layered silicates. Part V. Infrared, ultraviolet, and visible spectroscopic studies of benzidine-montmorillonite and related systems, 1802.
- Synthesis**, magnetic properties, and electronic spectra of complexes of nickel(II) carboxylates with pyridine and related ligands, 233.
- of pyrazolyl-borate, -aluminate, -gallate, and -indate ligands, and their chelating properties towards cobalt(II), nickel(II), copper(II), and zinc(II), 749.
- and reactivity of organometallic nickel(II) complexes obtained by oxidation of nickel(0) complexes with halogenated organic compounds, 283.
- and thermodynamic functions of rubidium and caesium tetrachloroborates, 357.
- of three bis(*o*-methylthiophenylthio)alkanes and their reactions with cobalt(II), nickel(II), copper(II), palladium(II), platinum(II), and rhodium(III) salts, 1566.
- X-ray crystal structure, and vibrational spectra of L-cysteinato(methyl)mercury(II) monohydrate, 438.

T

- Tantalum(V)** complexes, seven-co-ordinate distorted pentagonal bipyramidal, crystal structures, 2611.
- pentachloride, 1:1 addition complexes with *o*-phenylenebis(dimethylarsine), structural studies, 2031.
- Tellurium**-carbon bonds, isotopic studies by vibrational spectroscopy, 43.
- hexafluoride, reaction with ethylene glycol and other polyhydric alcohols, 1033.
- 125 Mössbauer, ^{125}Te , spectra of some aryltellurium-(II) and -(IV) compounds, 1323.
- of some mixed oxides of tellurium(IV) and some mixed-valence oxides of tellurium(IV, VI), 2207.
- Reaction of tetratellurium(2+) bis(hexafluoroarsenate) and hexatellurium(2+) bis(hexafluoroarsenate) with tetrafluoroethylene. The preparation of bis(perfluoroethyl) mono- and ditelluride, 488.
- Solid-state effects and the vibrational spectra of hexahalo-genotellurates(IV), 1980.
- Thallium**. Dimethylthallium(III) derivatives of the dodecahydro-*nido*-decaborate(2-) ion, 299.
- ^{213}Tl , ^{205}Tl , and ^{207}Tl , n.m.r. and INDO studies of dimeric dimethylthallium derivatives, 870.
- (III). Kinetics and mechanism of electron-transfer reactions of aqueous and co-ordinated thallium(III), 77, 81.
- (II), kinetics of reaction with manganese(II), iron(II) and cobalt(III) ions, 1.
- (III) oxidation of 1,4-dihydroxy-, 1-hydroxy-4-methoxy-, and 1,4-dihydroxy-2-methyl-benzene, kinetics, 794.
- Radicals in thallous nitrate, 553.
- Reduction of hexa-aquathallium(III) by hydrazine, kinetics and mechanism, 2541.
- (I) tetracarbonylcobaltate, an e.s.r. study of radiolysis, 2545.
- Thermal** properties of several complexes with *trans*-2-(2-quinolyl)methylenequinuclidine-3-one, 762.
- Thermochemical** behaviour of some tetrahedral dihalogeno-di(tertiary phosphine)cobalt(II) complexes, 1356.
- Thermochemistry**, solution, of phosphorus(V) bromide and tetrachlorophosphonium tetrachloroborate and tetrabromoborate, 967.
- of tri(tropolonato)- and tri(4-methyltropolonato)-aluminium(III), 1257.
- Thermodynamic** considerations in co-ordination. Part XX. A computerised approach to means of detecting oligo-nuclear complexes in metal ion-ligand solutions, 105.

Thermodynamic (contd.)

of the actinoid elements. Part V. Enthalpies and Gibbs energies of formation of some protactinium-(iv) and -(v) halides, 2256.

of complex formation of copper(II) and nickel(II) ions with glycylhistidine, β -alanylhistidine, and histidylglycine, 2112.

of formation of complexes of copper(II), nickel(II), and hydrogen ions and dipeptides containing non-coordinating substituent groups, 2106.

of formation of monoselenocyanato-complexes of cobalt-(II), nickel(II), and cadmium(II), 2236.

of ion-pairing of nitrate and chlorate with metal ions in aqueous solution, 2534.

Thorium(IV) amide complexes, 1409.

nitrate complexes, 1548.

Tin. Anhydrous methyl tin nitrates, mass spectral studies, 393.

-(II) aryl-carboxylates, -sulphonates, and halide methoxides, 1717.

-(II) bis(β -ketoenolates), complexes with chromium, molybdenum, and tungsten pentacarbonyls, 1486.

Bis(pentane-2,4-dionato)-, bis(1,1,1-trifluoropentane-2,4-dionato)-, and bis(1,1,1,5,5,5-hexafluoropentane-2,4-dionato)-tin(II), 821.

-(II) bis(phenoxides), bis(*O*-methyldithiocarbonate), and bis(diethyldithiocarbamate), 2015.

-119 chemical shifts, ^{119}Sn , in compounds with transition metal-to-tin bonds, nuclear magnetic double resonance studies, 311.

-(IV) chloride, reaction with inorganic silyl compounds, 1624.

complexes containing the nitrate group: crystal structure of polymeric (2-aminobenzothiazolato)nitratotin(II), 1595.

Crystal and molecular structure of bis(*N*-methyl-*N*-acetylhydroxylamino)dimethyltin(IV), 826.

of bis(1-phenylbutane-1,3-dionato)tin(II), 1455.

of bis(tetracarbonyl(trimethylstannio)ruthenium] (*Ru-Ru*), 2332.

of *calena*-(cyclohexanone oximate)trimethyltin, 1950.

of di- μ -bis(cyclopentadienyl)stannyl-bis(tetracarbonyl-iron), 2097.

of μ -(dichlorostannio)-bis(tricarbonyl- π -cyclopentadienylchromium), 230.

of quinolinium trichlorodimethylstannate(IV), 2230.

Crystal structure of chlorotrimethyl(triphenylphosphoranylideneacetone)tin(IV), 1552.

of tritin(II) dihydroxide oxide sulphate, 2241.

-(II) derivatives of alkyl acetoacetates, 4-phenylbutane-2,4-dione, 1,3-diphenylpropane-1,3-dione, cyclohexane-1,2- and -1,3-diones, and 2-hydroxycyclohepta-2,4,6-trien-1-one, 1722.

-(II) halides and bis(β -ketoenolates), interaction with di-iron enneacarbonyl, 2017.

^1H N.m.r. study of halogen exchange between trimethyltin halides in solution, 2378.

Kinetics of the hydrolysis of some dihalogenotin(IV) β -diketonates, 1471.

-119 Mössbauer spectra, ^{119}Sn of compounds involving tin bonded to chromium, molybdenum, tungsten, manganese, iron, or cobalt, 424.

of unassociated tin compounds at room temperature, 1483.

study of complexes with chlorine-bridged tin-molybdenum and tin-tungsten bonds, 1216.

and other directly bound elements, nuclear spin-spin coupling, 386.

Preparation and spectroscopic studies of five-coordinate β -diketonatotriorganotin compounds. Crystal structure of (1,3-diphenylpropane-1,3-dionato)triphenyltin(IV), 973.

-Pt(IV) bonds, formation, 809.

Reactions of bis(trifluoroacetato)divinyltin with *N*-, *O*-, or *N*- and *O*-donor ligands, and crystal structure of (2,2'-bipyridyl)bis(trifluoroacetato)divinyltin, 562.

of 1,1,3,3-tetramethyl-, and 1,3-dimethyl-1,3-diphenyl-1,3-disilacyclobutane with chlorosilanes in the presence of tin(IV) chloride, 1832.

of vinyltin compounds with arenesulphenyl halides and thiocyanates and some properties and reactions of the (2-aryltio-1-halogenoethyl)triphenyltin addition products, 1786.

Solid-state effects and the vibrational spectra of hexahalogenostannates(IV), 1980.

Stereochemistry of seven-coordinate complexes containing a tin-molybdenum bond, 1628.

tetrakis(diphenylketimine), crystal and molecular structure, 2469.

-(II) and -(IV) compounds, reaction with dodecahydrido-decaborate(2-) ion, 158.

Titanium di(η -arene) compounds, used to directly derive catalysts for the oligomerisation of butadiene, 1412.

-(III), oxidation by aqueous solutions of chlorine, kinetics and mechanism, 1203.

Pentachloro- and pentabromo-titanate(IV) ions, 1402.

Ab initio self-consistent field molecular-orbital calculation of the ground state of tetranitratotitanium(IV), 1934.

vapour used to prepare zerovalent di(η -arene)titanium compounds, 1419.

Transition-metal chemistry of quinuclidinone-containing ligands. Part V. Crystal structure of dichloro-

trans-2-(2-quinolyl)methylenequinuclidin-3-one]-cobalt(II), 96. Part VI. A study of the thermal properties of several complexes with *trans*-2-(2-quinolyl)methylenequinuclidin-3-one, 762.

complexes containing the η^1 - or η^2 -dimethylaminomethyl ligand, 1100.

of the macrocyclic ligand 5,12-dimethyl-1,4,8,11-tetra-azacyclotetradeca-4,11-diene, 1466.

of sulphur bis(*t*-butylimide), 40.

-diene complexes. Part II. Isomerization of rhodium-complexed penta-1,4- and *cis*-penta-1,3-dienes, 1794.

Trimethylsilyl, trimethylgermyl, and trimethylstannyl derivatives of cyclo-octatetraene and their complexes with the tricarbonyliron group, 256.**Tungsten alkyl- and aryl-(η -cyclopentadienyl)dinitrosyl complexes, 1022.**

(1-3- η -Allyl)dicarbonyltungsten(II) complexes and their reactions with some chelating anions, 1999.

bis(η -cyclopentadienyl) compounds, e.s.r. studies, 2548.

carbonyl complexes of 1,3-bis(methylseleno)-2,2-dimethylpropane, 209.

Formation of metal heptafluorotungstates(VI) in acetonitrile, 934.

hexafluoride in acetonitrile, oxidation of metals, 936.

hexakis(dimethylamide) He-I p.e. spectra. 72.

Tungsten (contd.)

Kinetics of iodination of tricarbonyl(η -cyclopentadienyl)-(trimethylstannyl)tungsten, 2042.

Mössbauer study of octacyanotungstate anions, 120.

Octacyanotungstates(v), 2489.

pentacarbonyl complexes of tin(II) bis(β -ketoenolates), 1486.

with bromine, kinetic investigation, 767.

of trimethylgallium with tricarbonyl- η^5 -cyclopentadienylhydridotungsten and with dicarbonyl- η^5 -cyclopentadienylhydrido(triphenylphosphine)tungsten, 1945.

Structure, spectra, and reactions of di- μ -(tricarbonyl- η^5 -cyclopentadienyl)tungsten-*OO'*(bisdimethylaluminum), 2499.

-(vi) tetrachloride sulphide and selenide and the analogous bromide, reaction with a range of donor molecules, 213.

-tin bonds, chlorine bridged, Mössbauer study, 1216.

Vibrational spectra of crystalline hexacarbonyltungsten in the 4 000 cm^{-1} region, 2353.

U

Uncatalysed and mercury(II)- and thallium(III)-catalysed elimination of chloride from the μ -amido- μ -chloro-bis-[tetra-amminecobalt(III)] complex, 277.

Unstable intermediates. Part CLII. Radicals in thallos nitrate, 553.

Uranium. Crystal and molecular structure of tetrachlorobis(triphenylphosphine oxide)uranium(IV), 1873.

Crystal structure of *catena*-di- μ -fluoro-(dimethyl sulphoxide)dioxouranium(VI), 2171.

of tetracaesium octaisothiocyanatouranate(IV), 1520.

-(IV) and dioxouranium(VI) nitrate amide complexes, 1409.

Nephelauxetic effects as a guide to complex formation for uranium(III), 1360.

-(IV) nitrate complexes, 1548.

Pentahalogeno-oxouranates(VI), 1963.

-(IV) poly(pyrazol-1-yl)borate complexes, 140.

Preparation, characterization, and crystal structure of *cis*-dichloro[*meso*-bis(*trans*-2-hydroxycyclohexyl)sulphide-*OOS*]dioxouranium(VI), 2161.

Preparation and crystal structure of aqua[bis(2-hydroxyphenylimino)ethanato-*OO'NN'*]dioxouranium, 612.

-(V) and protactinium(V) tropolonates, 1249.

V

Valence-band photoelectron spectra of some dicarbonyl(η -cyclopentadienyl)(ligand)iron compounds and tetrakis-[carbonyl(η -cyclopentadienyl)iron(II)], 2140.

Vapour transport of dioxygenyl salts, 316.

Vanadium. Base decomposition of decavanadate, 947.

-(II) cobaloxime electron-transfer reaction, transition from outer- to inner-sphere mechanism, 1245.

compounds, an X-ray emission study of metal-ligand bonding, 1885.

Crystal and molecular structure of *trans*-tetrakis-aqua-dibromovanadium(III) bromide dihydrate and the isomorphous chloro-compound, 894.

Hyperoxovanadium(IV) ions in the presence of vanadium-(IV), kinetics of decomposition, 2075.

-(IV) perfluoropinacولات, e.s.r. studies, 45.

Preparation and some properties of vanadium(III) tris-(metaphosphate) and vanadium(IV) bis(metaphosphate) 1806.

-(IV), reaction with chlorine in aqueous solutions, kinetics, 1199.

Vibrational and differential scanning calorimetry study of the polymorphism of sodium and potassium sulphates, 1912.

spectra and solid-state effects of hexahalogeno-stannates-(IV) and -tellurates(IV), 1980.

of crystalline hexacarbonyl-chromium, -molybdenum, and -tungsten in the 4000 cm^{-1} region, 2353.

of L-cysteinato(methyl)mercury(II) monohydrate, 438.

of solid xenon difluoride adducts, 535.

of ^{15}N -substituted hexa-amminenickel(II) chloride, hexa-amminecobalt(III) chloride, and tetra-ammine-zinc(II) iodide, 2199.

spectroscopy and crystal structure of hexa-ammine-chromium(III) pentachloromercurate(II), 2591.

with isotopic substitution, of diaryltellurium dihalides, 43.

spectrum, single crystal, of hexa(imidazole)cobalt(II) nitrate, 30.

Volumes of activation for aquation of tris(1,10-phenanthroline)iron(II) complexes in aqueous solution, 245.

W

Weak complexes of sulphur and selenium. Part III.

Effect of solvent on the stability of 1:1 complexes of sulphur dioxide, sulphinyl dichloride, and sulphonyl dichloride with halogen ions, 151. Part IV. Complex of selenium dioxide and seleninyl dichloride with halide ions, 2239.

X

X-Ray crystal structure characterization of cyclo(hexa-cyanoborane), 1784.

emission and photoelectron spectra from magnesium oxide: a discussion of the bonding based on the unit Mg_2O_4 , 2143.

emission study of metal-ligand bonding in some vanadium compounds, 1885.

Xenon dichloride, 1659.

difluoride adducts, solid, vibrational spectra, 535.

Y

Ytterbium. Crystal and molecular structure of tris-(dimethyl sulphoxide)trinitratoytterbium, 288.

Z

Zinc-base co-operation in aldehyde hydration; catalysis of nucleophilic attack, 1570.

-(II) complexes of mercapto- β -diketones, dipole-moment and dielectric-relaxation measurements, 886.

Zinc (contd.)

complexes with some histidine-containing peptides, stability constants, 1045.

Crystal and molecular structure of triaquazinc(II) thiodiglycolate monohydrate, 144.

Crystal structure of a tetrahedral complex of a 1,3-dithiolate: bis(*O*-ethyl thioacetothioacetato)zinc(II), 908.
of [NN'-tetramethylenebis(thioacetoneiminato)(2-)]-zinc, 429.

-glycine peptide systems, detection of oligonuclear complexes in solution, 105.

Neutron diffraction refinement of the structure of tetra-aquabis[dicyanomercuro(II)]zinc(II) nitrate trihydrate, 2072.

Vibrational spectra of ¹⁵N-substituted tetra-amminezinc(II) iodide, 2199.

Zirconium. Enthalpies of formation of alkali-metal hexachlorozirconates, 1598.

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CONTENTS

Page	Page
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

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Every latitude, consistent with brevity, in the form and style of papers is permitted, and no pattern for either is prescribed. Certain elements are, however, common to all papers, and these are considered.

Organization of Material

Title.—The choice of a title for a paper is of the greatest importance, since it is from the title that the important key-words used in information retrieval are taken. Not only should the title clearly and accurately indicate the content of that paper but also it should be as specific as the content and emphasis of the work permits. Brevity in a title, though desirable, should be balanced against its accuracy and usefulness.

Abbreviations, symbols, and formulae are generally not permitted, and it is usual to spell out terms where necessary.

Reference to the preceding part of a series must be made as the reference (numbered 1) to the title in the form: 'The Chemistry of Vitamin B₁₂. Part VIII.¹ Controlled Potential Reduction of Vitamin B_{12a}.' [Reference to a preceding part in the references is in the form: Part VII, H. A. O. Hill, B. E. Mann, J. M. Pratt, and R. J. P. Williams, *J. Chem. Soc. (A)*, 1968, 564. If the page number is unknown because the paper has still to be accepted, or is in the press, the paper number should be given.]

Summary.—Every paper for the *Journal* must be accompanied by a summary (50–250 words) setting out briefly and clearly the objects and results of the work. The summary should give a reader a clear idea of what the work has achieved and should be *independent* of the main text. This last point is of particular importance in connection with the names of compounds which, although they may be accompanied by a number which refers to a displayed formula in the body of the text, must be comprehensible without reference to this formula. Thus,

Apetalactone, a new triterpene lactone isolated from *Calophyllum apetalum* Willd. has been shown to be 4,28-dihydroxy-3,4-secofriedelan-3-oic acid lactone (IIa).

or

Reaction of sodium hydride with ω -hydroxyalkyltriphenylphosphonium salts $\text{Ph}_3\text{P}^+[\text{CH}_2]_n\text{OH X}^-$ (I) has been investigated. The salt (I; $n = 1$, $X = 1$) gave triphenylphosphine and formaldehyde. The salt (I; $n = 2$, $X = 1$) gave triphenylphosphine oxide and ethylene. Similar reactions were carried out with ω -hydroxyalkyltriphenylarsonium (XIV) and ω -hydroxyalkyldimethylphenylammonium (XV) salts.

The summary should concern only the main subject of the work and its main conclusions; details of an involved argument or synthesis should not be included and, although classes of compounds prepared or discussed should be given rather than a list of compounds, key compounds in the work should be referred to.

Introduction.—This should give clearly and briefly, with relevant references, both the nature of the problem under investigation and its background.

Results and Discussion.—It is usual for the results to be presented first, and for them to be followed by a

discussion of their significance. Only relevant results should be presented, and figures, tables, and equations should be used only for purposes of clarity and brevity. Data must not be reproduced in more than one form, e.g. in both figures and tables.

Experimental Section.—Descriptions of experiments should be given in detail sufficient to enable experienced experimental workers to repeat them; the degree of purity of materials should be given, as should the relative quantities used. Descriptions of established procedures are unnecessary. Standard techniques and methods used throughout the work should be stated at the beginning of the section. Apparatus should be described only if it is non-standard; commercially available instruments are referred to by their stock numbers (e.g. Perkin-Elmer 137 or Unicam SP 500 spectrophotometers). The accuracy of primary measurements should be stated. Unexpected hazards encountered during the experimental work should be noted. The detailed treatment of the Experimental section is dealt with in a forthcoming Notice to Authors.

Acknowledgements.—Contributors, other than co-authors, are acknowledged in a separate paragraph at the end of the paper; acknowledgements should be as brief as possible. Titles, Mr., Mrs., Miss, Dr., Professor, etc., are given; degrees are not given. Organizations which operate on a commercial basis are not acknowledged.

Bibliographic References.—These are given on a separate sheet at the end of the manuscript and are referred to in the text by superior roman numerals. They must be distinguished from footnotes which are given at the bottom of the page to which they refer; they are referred to by an asterisk (*), dagger (†), etc. Bibliographic references and footnotes are the subject of Notice No. 3.

General Detail

Type Size.—It should be noted that since the Experimental section and the results are printed in smaller type than the theoretical part, division between the two should be clear-cut and frequent alternation is not advisable.

Brevity.—Because of the large volume of work submitted for publication, brevity in the presentation of papers is essential and, for this reason, certain tendencies are discouraged; these are as follows:

- Unnecessary division of work into separate parts of a series. Papers are in no way discouraged solely on grounds of length.
- Submission of fragmentary work when this can be included in a larger communication.
- Historical introductory paragraphs in cases when a simple statement of the accepted present position suffices.
- Undue elaboration of hypotheses.
- Over-detailed and verbose exposition of ideas.
- Excessive use of diagrams, for example, straight-line plots that can be adequately expressed as an equation together with, if necessary, a table of deviations.
- Duplication of data as between text, tables, and figures, etc.

- (h) Details of the preparation of simple derivatives such as esters, ethers, semicarbazones, *etc.*, and slight variations of essentially the same technique. (Unless the conditions are critical, quantities are superfluous, and only an indication of reagents and/or conditions is required.)

Spelling.—Standard English spelling is used (*Oxford English Dictionary*), although latitude with respect to alternative spellings for certain words is allowed. Where one form or the other of a particular spelling is adopted it should be used consistently throughout a paper.

Punctuation.—Although punctuation follows standard English practice, the following conventions are observed:

- (a) A comma is placed before 'and' or 'or' in a series such as 'oxygen, sulphur, and selenium' or ' λ_{max} 237, 295, and 343 nm.'
- (b) Parentheses, square brackets, and braces are used, as necessary, in that order, *i.e.* {[()]}.
- (c) When a word is followed by a punctuation mark the parenthetical phrase must be inserted before the latter, *e.g.* 'm.p. 234° (decomp.)', and not 'm.p. 234°, (decomp.)'.
- (d) A colon is used to separate a ratio, as in 1 : 20—not a solidus 1/20.
- (e) Parenthetical expressions of the same physical quantity in different units are separated by a comma (3.9 g, 0.1 mol) (30 ml, 1 mol); expressions of different physical quantities are separated by a semicolon (2.9N; 30 ml) (d 0.88; 8 ml).

Hyphenation.—Hyphens are used for two purposes: to divide and to compound.

Division. It is common practice to divide words, particularly when in a sequence, when one part is common to several of the words; in such cases, the hyphen, representing the point of attachment to the common part, is always inserted, *e.g.* 'the chloro-, bromo-, and fluoro-naphthalenes,' 'the *o*-, *m*-, or *p*-nitrotoluenes,' or 'the oxo-naphthalenes and -naphthalenes.' It is not good practice, however, to detach both a common prefix and a common suffix in a series, *e.g.* 'the dihydroxy- naphthalene- and phenanthrene-diones,' since confusion can arise.

'Sections' of class names such as diazo-ketone, alkyl-diamine, epoxy-nitro-sulphone, *etc.*, are linked by hyphens.

It is also Society usage to insert a hyphen after a prefix which ends in a vowel or y; the hydroxy-group, the *aza*-function, the carboxy-compounds, the nitro-derivatives, but the methyl group (note that hydroxy, acetoxy, carboxy, ethoxy, and methoxy are used and not hydroxyl, acetoxyl, carboxyl, ethoxyl, and methoxyl).

It is customary to separate a pair of the same letter when these letters (in the same fount) would not naturally fall together, *e.g.* butyl-lithium, iodo-octane.

Compounding. A hyphen is often necessary when words are compounded to form a single modifying adjective to precede the noun being modified, thus: 'a melting-point determination' or 'a free-radical chain mechanism.' A hyphen is not needed when adverbs are compounded, as in 'an electrically heated oven,' or for two-word chemical names such as 'nitric acid solution.'

Miscellaneous uses of hyphens. Hyphens are used to set apart numbers, configurational letters, Greek

letters, and italicized prefixes: 1,2,5-trimethylcyclohexane, *D*-gluco-hexose, *s*-trinitrobenzene, β -chlorophenethylbenzene, tri- μ -carbonyl-bis(tricarbonyliron), and 3-methylpent-*trans*-2-ene.

Use of Italics.—As described below, italics are indicated in a typescript by single underlining. Particular attention should be paid to the following uses.

(a) Foreign words and phrases and Latin abbreviations are given in italics: *e.g.*, *in toto*, *in vivo*, *ca.*, *cf.*, *i.e.*, *etc.*

(b) In the names of chemical compounds or radicals italics are used for prefixes (other than numerals or symbols) when they define the position of named substituents, or when they define stereoisomers: other prefixes are printed in roman. (*Note:* Initial capital letters are not to be used with italic prefixes or single-letter prefixes: full points are not to be associated with letter prefixes.)

o-, *m*-, and *p*-nitrotoluenes, but *ortho*-, *meta*-, and *para*-compounds (*o*-, *m*-, and *p*- are used only with specific names; *ortho*-, *meta*-, and *para*- are used with classes), *s*-trinitrobenzene, *NN*-dimethylaniline, *trans*- and *cis*-hexane-1,2-diol, *gem*- and *vic*-diols, benzil *anti*-oxime, 3-*O*-methyl-L-glycero-tetrolase.

At the beginning of a sentence the first roman letter after the prefix is capitalized: '*D*-glycero-*D*-gluco-Heptose was subjected . . . ' and ' β -*p*-Tolylchalcone gave . . . '

(c) The scientific names of genera, species, and varieties are italicized.

(d) In references to periodicals their names or abbreviations are set in italics.

Note: Greek letters are not italicized, and should not therefore be underlined in typescripts.

Headings.—(a) Main sections (Experimental, Discussion, *etc.*): side-heading, small capitals, no final fullstop.

(b) Main side-heading: italics, initial capital letter for each noun and adjective, final fullstop and dash.

(c) Subsidiary side-heading: italics, first initial capital only, final fullstop but no dash.

(d) Further subdivision: by italic (a), (b), *etc.* (no following fullstop), and finally (i), (ii), *etc.* If (a), (b), *etc.* are used in front of a subsidiary side-heading, then for contrast these letters are not italicized.

Letters and prefixes which are ordinarily printed in italics are transferred for contrast into roman type in italicized phrases (see example below, where *O*-alkyl becomes *O*-alkyl).

Physicochemical symbols, however, remain in their prescribed form, and numerals and Greek letters are not italicized.

Examples:

EXPERIMENTAL

Preparation of Aliphatic Aldoximes and Ketoximes.

—Acetoxime *O*-alkyl ethers. (a) Acetoxime (100 g) was dissolved . . .

Density (d) of the Alcohol at 295 K.—The series of aliphatic alcohols . . .

Note: In the above examples it should be noted that the type of print required to indicate italics, capitals, small capitals, *etc.* is shown by underlining; this convention must be strictly adhered to, *i.e.*

Single underlining for italic type

Double underlining for SMALL CAPITALS

Treble underlining for ORDINARY CAPITALS

Wavy underlining for bold black type

NOTICES TO AUTHORS—No. 3/1968

Bibliographic References and Footnotes

A clear distinction is made between bibliographic references and footnotes. The latter are used to present material which, if included in the body of the text, would disrupt the flow of the argument but which is, nevertheless, of importance in qualifying or amplifying the textual material. Such footnotes are referred to with the following symbols: *, †, ‡, §, ¶, ||, etc. [Note: Since an asterisk is used to indicate the author to whom correspondence should be addressed, its use early on in a paper is not advised; a dagger (†) is preferred.]

Bibliographic References.—Reference to the source of statements in the text is made by use of *superior numerals* at the appropriate place. The references themselves are given as footnotes at the bottom of the corresponding page in the final printed text. It is thus *essential* that bibliographic references are numbered in the order in which they will appear.

When citation of a paper is repeated the numeral previously given to that reference is to be used also at the second citation; the footnote is not repeated.

The position of the superior numeral should be chosen with care, particularly when it does not follow an author's name. If placed adjacent to punctuation, the numeral should normally be placed after the punctuation mark, e.g. 'This compound was shown to be the dienone,³ which ...'. It may be necessary to modify this rule, however, to avoid confusion, thus: 'In this way the method was found to be suitable for lead², tin³, bismuth⁴, and mercury⁵'.

Particular care is necessary where a reference number is likely to be confused with a superscript numeral indicating a power index: '... which gave a value of 2.3 cm³...' should be written as '... which gave a value³ of 2.3 cm³' or '... which gave a value of 2.3 cm (ref. 3)'.

Since it is usually difficult to print a table in a given position in the text, references within the table are best dealt with by taking the individual references into the printed footnotes to the tables and using a new reference number sequence therein. Should the references cited in the tables appear much earlier in the text, these earlier reference numbers may be used.

Journals. Journal titles must be abbreviated to the forms listed in Notice 4 of this series. The main principles which underlie these abbreviations are: (i) clarity to a chemist; (ii) a fullstop after each abbreviated word, but not after words in full; (iii) English and Latin adjectives have initial capital letters, other adjectives do not.

Books. Titles of books are cited in quotation marks, in upright letters, and the author(s), title, publisher, town, date (or edition, if more than one has

been published), and page number (if required) must be given in that order:

C. J. M. Stirling, 'Radicals in Organic Chemistry,' Oldbourne Press, London, 1965, p. 69.

T. J. Suen, in 'Polymer Processes,' ed. C. E. Schildknecht, Interscience, New York, 1956, vol. X, p. 295.

Patents. Patents should be indicated in the form: B.P. 367,450, 367,455-7. U.S.P. 1,171,230. G.P. 436,112-4. Jap.P. 20,101. Dates are indicated thus: B.P. 666,776/1956. Patents which are applied for must always be given a year, e.g. B.P. Appl. 102/1968.

Reports and Bulletins, etc.

R. A. Allen, D. B. Smith, and J. E. Hiscott, 'Radioisotope Data,' UKAEA Research Group Report AERE-R 2938, H.M.S.O., London, 1961.

'Collected Papers on Methods of Analysis for Uranium and Thorium,' Geological Survey Bulletin 1006, U.S. Government Printing Office, Washington D.C., 1954.

Material presented at meetings.

N. N. Greenwood, Abstracts, Anniversary Meeting of the Chemical Society, Glasgow, 1965, C1.

N. S. Anderson and D. A. Rees, in 'Proceedings of the Vth International Seaweed Symposium,' ed. E. G. Young and J. L. McLachlan, Pergamon Press, Oxford, 1966, p. 405.

Theses.

A. D. Mount, Ph.D. Thesis, University of London, 1967.

Reference to unpublished material. For material presented at a meeting, congress, or before a society, etc., but not published, the following form is used:

¹ A. R. Jones, presented in part at the XXth Congress of the International Union of Chemistry, Paris, September, 1960.

For material accepted for publication, but not yet published, the following form is used:

² A. R. Jones, *J. Amer. Chem. Soc.*, in the press.

If the paper has been submitted to the Society, the paper number should be given:

³ A. R. Jones, *J. Chem. Soc. (A)*, in the press (8/556).

For material submitted for publication but not yet accepted the following form is used:

⁴ A. R. Jones, submitted for publication in *Angew. Chem.*

For personal communications the following form is used:

⁵ G. B. Ball, personal communication. (Note: the form, G. B. Ball, private communication, is inappropriate.)

If material is to be published but has yet to be submitted the following form is used:

⁶ Unpublished data.

Names.—The names and initials of all authors are always given in the reference footnote; they must not be replaced by the phrase *et al.* This does not prevent some, or all, of the names being mentioned at their first citation in the cursive text: initials are not necessary in the text.

For Chinese and Spanish authors all names should be given as in the original, since the patronymic is not always given last in these languages. If co-authors are to be collectively cited, as in 'Smith and his co-workers' or 'Smith *et al.*,' the latter form is inappropriate unless the individual name 'Smith' appears first among the authors named in the original.

Composite References.—Whenever possible, composite references should be used rather than a series of individual references. The style for composite references is as follows:

¹ A. B. Jones, *J. Chem. Soc. (A)*, 1967, 234.

² A. B. Jones, *J. Chem. Soc. (A)*, 1966, 123; 1967, 234.

³ A. B. Jones, *J. Chem. Soc. (A)*, 1966, 123; *J. Amer. Chem. Soc.*, 1956, 78, 1234.

⁴ A. B. Jones, *J. Chem. Soc.*, 1956, 234; A. B. Jones and C. D. Brown, *J. Chem. Soc. (B)*, 1967, 234, 1077; 1968, 599.

⁵ A. B. Jones, *J. Amer. Chem. Soc.*, 1956, 78, 1234; A. B. Jones and C. D. Brown, *ibid.*, 1957, 79, 567; A. B. Jones and E. F. Green, *ibid.*, p. 999.

If only one paper from a composite reference is required for citation later, then two numbers may be assigned to the first citation (*e.g.* Jones ^{1,2}); alternatively, long composite references may be divided by letters, *e.g.*:

(a) A. B. Jones, *J. Chem. Soc. (A)*, 1954, 467;

(b) A. B. Jones and C. D. Brown, *J. Chem. Soc. (B)*, 1967, 234.

A. B. Jones, *J. Chem. Soc. (A)*, (a) 1953, 267; (b) 1954, 1742; (c) *etc.*

A composite reference may cite a previous reference in the form:

¹² A. B. Jones, *J. Chem. Soc.*, 1956, 234; C. D. Brown, *ref. 5*.

(Note: *ibid.* is used only within a given reference and not to refer from one reference number to another: the abbreviated title for the journal should be repeated for separate reference numbers.)

Idem, *loc. cit.*, and *op. cit.* are not used in references.

Abbreviations of Journal Titles.—Abbreviations for journal titles are constructed on the following general principles:

(a) When the full title consists of a single word it is not abbreviated: *Nature*, *Experientia*, *Tetrahedron*.

(b) In other cases the title or words selected from it are abbreviated as far as is consistent with the general principles:

(i) The abbreviated title should still enable the reader or librarian to identify the journal with ease; it should be readily expandable into the original or into full words near to the original. Accordingly, many words are unsuitable for abbreviation: *Acta*, *Berguesen*, *Brewing*, *Cercetari*, *Dansk*, *Finishing*, *Folyoirat*, *Food*, *Istanbul*, *Sinica*.

(ii) The same word, if abbreviated, is always abbreviated in the same way, irrespective of the full title of the journal in which the word appears.

(iii) Nouns and adjectives derived directly from them receive the same abbreviation; initial capital letters are used for nouns, and small (lower case) initial letters for adjectives (unless they form the first word of the abbreviated title), except that for English and Latin titles adjectives are also given initial capital letters. Examples: *Chemie Chem.*, *chemische(n) chem.*, *Chemistry or chemical Chem.*, *Chimie Chim.*, *chimique chim.*, *Chimie or chimica Chim.*, *Belgique Belg.*, *belges belg.*

(iv) Related words not strictly covered by clause (iii) are differentiated. Examples: *Chemistry* and *chemical Chem.*, but *Chemists* in full; *Engineering* (adjective and noun) *Eng.*, but *Engineers* in full.

(v) Special sources of possible confusion require special treatment. Examples: *Ind.* for *Industry* and *industrial*, but *India(n)* in full; *Anal.* for *Analele*, *Analyt.* for *Analytical*, *Ann.* for *Annals*, *Annales*, *Annalen*, *Annali*, or *Annual*, but the full words for *Anales*, *Analyst*, and *Annuaire*.

(c) 'The', 'a', 'of', and 'and', as well as their equivalents in other languages, are omitted, except for rare cases where they seem essential for clarity, as in *Chem. and Ind.* (*Chemistry and Industry*, not *Chemical Industry* or *Industrial Chemistry*).

(d) All abbreviations are followed by a fullstop (full point); full words in references do not require to be followed by a fullstop.

(e) Names of countries are added, without punctuation, when they form part of the full title, as in *J. Chem. Soc. Japan* (*Journal of the Chemical Society of Japan*) or *Bull. Soc. chim. France* (*Bulletin de la Societe chimique de France*; the 'France' may not be omitted here as the list contains two other *Bull. Soc. chim.* as well as *Bull. Soc. Chim. biol.*). The country of origin is added in parentheses when needed to avoid confusion, as in *Ann. Chim. (France)* (*Annales de Chimie*) and *Ann. Chim. (Italy)* (*Annali di Chimica*), and for some titles of Japanese and translations from Russian journals, as in *Pharm. Bull. (Japan)* and *J. Gen. Chem. (U.S.S.R.)*.

(f) The following long-established extreme abbreviations are retained: *Ber.* (since 1945 this journal has been superseded by *Chem. Ber.*); *Compt. rend.*; *Gazzetta*; *Annalen*.

NOTICES TO AUTHORS—No. 4/1968

List of Abbreviations for Periodicals most commonly found in Chemical Papers

The following list is compiled from those journals which are received in the Chemical Society Library. Since journal titles and their abbreviations are printed in *italics*, they must be underlined in the manuscript.

- Accounts Chem. Res.*
Acta Acad. Scient., Math. Phys.
Acta Biochim. Biophys. Acad. Sci. Hung.
Acta Biochim. Iran.
Acta Biochim. Polon.
Acta Chem. Scand.
Acta Chim. Acad. Sci. Hung.
Acta Cryst.
Acta Metallurgica
Acta Phys. et Chem. Sci. Hung.
Acta Phys. et Chem. Szeged.
Acta Polytech. Scand. (Chem.)
Acta Vitaminol.
Adv. Alicyclic Chem.
Adv. Anal. Chem. Instrum.
Adv. Appl. Microbiol.
Adv. Carbohydrate Chem.
Adv. Catalysis
Chem. Chem. Eng.
Chem. Clin. Phys.
Adv. Clin. Chem.
Adv. Colloid Interface Sci.
Adv. Enzymol.
Adv. Fluorine Chem.
Adv. Food Res.
Adv. Free-Radical Chem.
Adv. Heterocyclic Chem.
Adv. Inorg. Chem. Radiochem.
Adv. Lipid Res.
Adv. Macromol. Chem.
Adv. Magn. Resonance
Adv. Org. Chem.
Adv. Organometallic Chem.
Adv. Pest Control Res.
Adv. Petrol. Chem.
Adv. Photochem.
Adv. Phys.
Adv. Phys. Org. Chem.
Adv. Protein Chem.
Adv. Quantum Chem.
Adv. Struct. Res. Diffraction Methods
Advancement Sci.
Afrimad
Agric. and Biol. Chem. (Japan)
Agric. Chem.
Agricola de Brasil, Quim.
Allg. prakt. Chem.
Amois
Amer. Ceram. Soc. Bull.
Amer. Dyestuff Reporter
Amer. Inst. Chem. Engineers J.
Amer. J. Pharm.
Amer. J. Sci.
Amer. Perfumer
Anais Acad. brasil. Cienc.
Anis Acad. Brasil. Quim.
Anal. Shi., Univ. "Al. I. Cuza" Iasi.
 Sect. Ic
Anales Asoc. quim. argentina
Anales Bromatol.
Anales de Quim.
Analyst
Analyst. Biochem.
Analyst. Chem.
Analyst. Chim. Acta
Analyst. Letters
Angew. Chem.
Angew. Chem. Internat. Edn.
Angew. makromol. Chem.
Ann. Acad. Sci. Fennicae
Ann. Chim. (France)
Ann. Chim. (Italy)
Ann. Endocrinol.
Ann. Fals. et Expertise chim.
Ann. Inst. Pasteur
Ann. New York Acad. Sci.
Ann. pharm. franc.
Ann. Physik
Ann. Physique
Ann. Report Fac. Pharm., Kanazawa Univ.
Ann. Report Inst. Seaweed Res.
Ann. Report ITSU Lab.
Ann. Report Sankyo Res. Lab.
Ann. Reports Medicin. Chem.
Ann. Rev. Biochem.
Ann. Rev. Microbiol.
Ann. Rev. N.M.R. Spectroscopy
Ann. Rev. Phys. Chem.
Ann. Rev. Plant Physiol.
Ann. Soc. sci. Bruxelles
Ann. Stazioni chim.-agrar. sper. Roma
Ann. Surveys Organometallic Chem.
Ann. Univ. M. Curie-Skłodowska, Sect. AA
- Ann. Univ. Sci. Budapest, Sect. Chim.*
Appl. Spectroscopy
Arch. Biochem. Biophys.
Arch. Pharm.
Arch. Sci.
Arkiv. Fysik
Arxiv Kemi
Armyn. khim. Zhur.
Arzneim.-Forsch.
Atti Accad. nat. Lincei, Rend. Classe Sci. fis. mat. nat.
Austral. J. Biol. Sci.
Austral. J. Chem.
Austral. J. Phys.
Azerb. khim. Zhur.
- Ber. Bunsengesellschaft Phys. Chem.*
Berg u. Hüttenmann, Mondash, montan.
Hochschule Leoben
Biochemistry
Biochemistry (U.S.S.R.)
Biochem. Biophys. Res. Comm.
Biochem. J.
Biochem. Pharmacol.
Biochem. Prep.
Biochem. Soc. Symp.
Biochim. appl.
Biochim. Biol. sper.
Biochim. Biophys. Acta
Biofizika
Biokhimiya
Biol. Rev. Camb. Phil. Soc.
Biopolymers
Biotechnol. and Bioeng.
Bol. Inst. Quim. agric. (Brazil)
Bol. Inst. Quim. Univ. nac. auton.
 Mexico
Bol. Soc. Chilena Quim.
Bol. Soc. quim. Peru
Boll. sci. Fac. Chim. ind. Bologna
Bol. Soc. ital. Biol. sper.
Bolyv-Kagak
Brennstoff-Chem.
Brit. Bull. Spectroscopy
Brit. Chem. Eng.
Brit. Chemist
Brit. Corrosion J.
Brit. J. Pharmacol.
Bull. Inst. Politek. Iasi
Bull. Acad. polon. Sci., Sér. Sci. chim.
Bull. Acad. Sci., U.S.S.R.
Bull. Chem. Soc. Japan
Bull. Inst. Chem. Acad. Sinica
Bull. Inst. Chem. Res., Kyoto Univ.
Bull. Inst. Nuclear Sci. "Boris Kidrich"
Bull. sci., Conseil Acad. R.S.F., Yougo-slavie
Bull. Soc. chim. belges
Bull. Soc. chim. Beograd
Bull. Acad. Sci. chim. biol.
Bull. Soc. chim. France
Bull. Soc. roy. Sci. Liège
- Canad. Chem. Processing*
Canad. J. Biochem.
Canad. J. Chem.
Canad. J. Chem. Eng.
Canad. J. Pharm. Sci.
Canad. J. Phys.
Canad. Spectroscopy
Carbohydrate Res.
Carbon
Catalysis Rev.
Cellulose Chem. Technol.
Cereal Chem.
Cesk. Farm.
Chem. Age
Chem. analit.
Chem. and Ind.
Chem. and Pharm. Bull. (Japan)
Chem. and Phys. Carbon
Chem. and Phys. Lipids
Chem. Ber.
Chem. Comm.
Chem. Engineer
Chem. Eng.
Chem. Eng. (Japan)
Chem. Eng. News
Chem. Eng. Progr.
Chem. Eng. Progr., Monographs
Chem. Eng. Progr., Symp.
- Chem. Eng. Sci.*
Chem. Eng.
Chem. Heterocyclic Compounds
Chem. High Polymers (Japan)
Chem. in Britain
Chem. in Canada
Chem. Ind. (Düsseldorf)
Chem. Ind. Internat.
Chem.-Ing.-Tech.
Chem. lists
Chem. Natural Compounds
Chem. Oil and Gas, Romania
Chem. Phys. Letters
Chem. Process Eng.
Chem. Processing
Chem. Processing (S. Africa)
Chem. Processing (U.S.A.)
Chem. Průmysl
Chem. Rev.
Chem. Soc. Special Publ.
Chem. Slovanska
Chem. Tech. (Berlin)
Chem. Week
Chem. Wechblad
Chem.-Zig.
Chem. Zvesti
Chemist-Analyst
Chemist and Druggist
Chemistry (Quart. Chinese Chem. Soc., Formosa)
Chim. analyt.
Chimia (Switz.)
Chimica e Industria
Chimie et Industrie
Chimika Chronika
Chromatographia
Chromalog. Rev.
Ciencia
Clinical Biochem.
Clinical Chem.
Clinica Chim. Acta
Coke and Chemistry (U.S.S.R.)
Coll. Czech. Chem. Comm.
Colloid J. (U.S.S.R.)
Combustion and Flame
Comm. Fac. Sci. Univ. Ankara
Compt. rend.
Compt. rend. Acad. bulg. Sci.
Compt. rend. Soc. Biol.
Compt. rend. Soc. Phys. Hist. nat.
 Geneve
Compt. rend. Trav. Lab. Carlsberg
Co-ordination Chem. Rev.
Corrosion
Crosslinking Sci.
Croat. Chem. Acta
Current Sci.
- Dansk Tidsskr. Farm.*
Dechema Monograph.
Deut. Farb.-Z.
Deut. Lebensmittel-Rundschau
Developments Appl. Spectroscopy
Discuss. Faraday Soc.
Diss. Abs.
Doklady Akad. Nauk Armyan. S.S.R.
Doklady Akad. Nauk Azerb. S.S.R.
Doklady Akad. Nauk S.S.S.R.
Dopovidni Akad. Nauk Ukrain. R.S.R.
 Ser. B.
Double-Liaison
- Educ. in Chem.*
Electroanal. Chem.
Electrochem. Technol.
Electrochim. Acta
Elektrokhiymiya
Endomour
Enzymologia
Erdöl u. Kohle
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- Fed. Proc.*
Ferrnat. i spirit. Prom.
Feste, Seifen, Anstrichm.
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Fiz.-khim. Mekh. Materialov
- Fiz. Metall. i Metallov*
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 Fuel
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Gekhimiya
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Grasays at Acetates
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Helv. Phys. Acta
High Energy Chem.
- Ind. Chim.*
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Inorg. Chim. Acta
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J. Chem. Soc. (C)
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Khim. Prom.
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Khim. vysok. Energii
Kinetics and Catalysis (U.S.S.R.)
Kinetika i Kataliz
Kolloid-Z.
Kolloid. Zhur.
Kristallografiya
Kunst. Plastics

Lab. Practices
Lipids

Macromolecules
Macromol. Rev.
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Magyar Kém. Folyóirat
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Mekh. Polimerov
Melliand Textilber.
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Methods Biochem. Analysis
Microchem. J.
Mikrochim. Acta
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Nachr. Akad. Wiss. Göttingen, Math.-phys. Kl.
Nahrung
Nature
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Organometallic Chem. Rev.
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Physica
Phytochemistry
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Polymer
Polymer Sci. (U.S.S.R.)
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Russ. J. Inorg. Chem.
Russ. J. Phys. Chem.

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Suomen Kem.
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Svensk Papperstidn.
Synthetic Methods Org. Chem.

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Tetrahedron
Tetrahedron Letters
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Tidsskr. Kjemi Bergusen Md. (Kjemi)
Topics Stereochem.
Trans. Brit. Ceram. Soc.
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Transition Metal Chem.
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Trudy Inst. khim. Akad. Nauk Azerb. S.S.S.R.
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Trudy Khim. i khim. Tekhnol.
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Ukrain. biokhim. Zhur.
Ukrain. khim. Zhur.
Uspekhi Khim.
Uspekhi Khim. Zhur.

Verhandel. h. ned. Akad. Wetenschap., Afd. Natuurk.
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Vestnik Moskov. Univ.
Vestnik Slovensk. kem. Društva
Vestpremi Vegyi. Egyetem Köz.
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Vysokomol. Soedineniya

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Z. Physik
Z. physiol. Chem.
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Z. weiss. Phot.
Zeszyty Nauk., Mat., Fis., Chem.
Zeszyty Nauk. Politech. Iod. (Chem.)
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Zhur. eksp. teor. Fis.
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Zhur. obshch. Khim.
Zhur. org. Khim.
Zhur. priklad. Khim.
Zhur. priklad. Spektroskopii
Zhur. strukt. Khim.
Zhur. Vsesoyuz. Khim. obshch. im. D. T. Mendeleeva

NOTICES TO AUTHORS—No. 5/1969

The International System of Units (SI)

Preamble

For many years the practice of The Society in respect of units has been based on the recommendations of a joint Committee of The Royal Society, The Chemical Society, The Faraday Society, and The Physical Society. The 1951 set of recommendations published by that Committee formed the basis of Chapter 7 of the 'Handbook for Chemical Society Authors' but since their promulgation much effort has been expended in international circles to devise and approve a basic set of coherent units. This having been completed, The Joint Symbols Committee of The Royal Society, of which The Chemical Society is a participating member, has produced a completely new set of recommendations in a pamphlet 'Symbols, Signs and Abbreviations' 1969 (copies of this pamphlet or further details can be obtained from the Managing Editor, The Chemical Society, Burlington House, London, W1V 0BN). The basis of the new recommendations is the 'Système International d'Unités' (to be abbreviated to SI, in all languages).

The advantages offered by SI are as follows.

(i) It is a truly coherent system, *i.e.* the product or quotient of any two unit quantities in the system is the unit of the resultant quantity. This contrasts with the previous situation where, even in metric systems used within the same discipline, many additional units are arbitrarily and sometimes differently defined.

(ii) SI derives nearly all the quantities needed in all sciences and technologies from a very small set of base-units.

(iii) The variety of multiples and sub-multiples in common use is minimized.

(iv) A more uniform presentation can be ensured.

(v) Presentation is such that the relation of any derived unit, or multiple or sub-multiple of a derived unit, to the coherent unit is always obvious and simple.

Policy

(1) The Society announces its approval and support of SI, and its intention that SI shall become the preferred system in its publications.

(2) *Guidelines for the publications of the Society.* The Society realises that public acceptance of this system will be more a matter of education and tolerance than of dictatorial action. It nevertheless desires that the SI system and units compatible with it shall *rapidly* become the established standard in the Society's publications. An author will not be denied any reasonable usage, but if non-SI units are used for critical data or for quantities measured to a high order of accuracy (as opposed to the rough physical conditions of an experiment), the definitive values will be expressed in SI units as well.

The following will be the guidelines used:

- A metric system will always be used in preference to a non-metric one.
- The SI system will be the standard usage.

(c) The units used to record the *definitive* values of 'critical data' or quantities measured to high degree of accuracy will be of the SI system.

(d) When non-SI units are used they must be adequately explained unless their definition is obvious (*e.g.* degree Celsius, mmHg, g, h). The derivation of derived non-SI units will be indicated.

(e) Equations involving electrical quantities should normally be those appropriate for use with SI (rationalized m.k.s.) units. If authors wish to use equations suitable for e.s.u. or e.m.u. the lack of consistency with SI units must be explicitly noted.

(3) *The principal changes.* There are four of these:

(a) Basic units: the metre and the kilogramme replace the centimetre and the gramme of the old metric system.

(b) The unit of force is now the newton (kg m s^{-2}).

(c) The unit of energy is the joule and of power the joule per second (watt); thus the variously defined calories and non-metric units of energy and power are superseded.

(d) 'Electrostatic' and 'electromagnetic' units are replaced by SI electrical units.

Detail

(4) *Definition.* A quantity is expressed as the product of a numerical value and a unit.

(5) *The System.* The fully coherent SI consists of base-units, supplementary units, derived units, and decimal multiples and sub-multiples of these units, formed by use of prefixes only.

(6) *Coherent systems.* A coherent system is one based on a selected set of 'base-units' from which 'derived units' are obtained by multiplication without introducing numerical factors.

(7) *Base-units.* The name International System of Units (SI) was adopted by the Conférence Générale de Poids et Mesures in 1960 for the coherent system now based on the base-units given in Table 1.

TABLE 1

Physical quantity	Name of base-unit	Symbol for unit
length	metre	m
mass	kilogramme	kg
time	second	s
electrical current	ampere	A
thermodynamic temperature	kelvin	K
luminous intensity	candela	cd
amount of substance	mole	mol

(8) *Supplementary units.* The SI also includes two 'supplementary' *dimensionless* units as follows:

Physical quantity	Name of unit	Symbol for unit
plane angle	radian	rad
solid angle	steradian	sr

(9) *Multiples and sub-multiples.* In the SI there is one and only one basic unit for each physical quantity. Decimal fractions and multiples of these basic units may, however, be constructed by use of certain prefixes (see Table 2). They may also be used with derived SI units.

TABLE 2

Fraction	Prefix	Symbol	Multiple	Prefix	Symbol
10^{-1}	deci	d	10	deka	da
10^{-2}	centi	c	10^2	hecto	h
10^{-3}	milli	m	10^3	kilo	k
10^{-6}	micro	μ	10^6	mega	M
10^{-9}	nano	n	10^9	giga	G
10^{-12}	pico	p	10^{12}	tera	T
10^{-15}	femto	f			
10^{-18}	atto	a			

The combination of a prefix and a unit symbol constitutes a new single unit symbol; compounding of prefixes is not permitted.

Although it will not always be possible, particularly in Tables, the general principle should be to choose a unit (*i.e.* including multiple or sub-multiple) such that the resulting numerical value is between 0.1 and 1000.

(10) *Derived units.* Some derived units have special names and symbols, and these are given in Table 3.

TABLE 3

Physical quantity	Name of SI unit	Symbol for SI unit	Definition of SI unit
energy	joule	J	$\text{kg m}^2 \text{s}^{-2}$
force	newton	N	$\text{kg m s}^{-2} = \text{J m}^{-1}$
power	watt	W	$\text{kg m}^2 \text{s}^{-3} = \text{J s}^{-1}$
electric charge	coulomb	C	A s
electric potential difference	volt	V	$\text{kg m}^2 \text{s}^{-2} \text{A}^{-1} = \text{J A}^{-1} \text{s}^{-1}$
electric resistance	ohm	Ω	$\text{kg m}^2 \text{s}^{-2} \text{A}^{-2} = \text{V A}^{-1}$
electric capacitance	farad	F	$\text{A}^2 \text{s}^4 \text{kg}^{-1} \text{m}^{-2} = \text{As V}^{-1}$
magnetic flux	weber	Wb	$\text{kg m}^2 \text{s}^{-2} \text{A}^{-1} = \text{Vs}$
inductance	henry	H	$\text{kg m}^2 \text{s}^{-2} \text{A}^{-2} = \text{V A}^{-1} \text{s}$
magnetic flux density	tesla	T	$\text{kg s}^{-2} \text{A}^{-1} = \text{Vs m}^{-2}$
luminous flux	lumen	lm	cd sr
illumination	lux	lx	cd sr m^{-2}
frequency	hertz	Hz	s^{-1}

Others do not

Physical quantity	SI unit	Symbol for SI unit
area	square metre	m^2
volume	cubic metre	m^3
density	kilogramme per cubic metre	kg m^{-3}
velocity	metre per second	m s^{-1}
angular velocity	radian per second	rad s^{-1}
acceleration	metre per second squared	m s^{-2}
pressure	newton per square metre	N m^{-2}
kinematic viscosity, diffusion coefficient	square metre per second	$\text{m}^2 \text{s}^{-1}$
dynamic viscosity	newton second per square metre	N s m^{-2}
electric field strength	volt per metre	V m^{-1}
magnetic field strength	ampere per metre	A m^{-1}
luminance	candela per square metre	cd m^{-2}

TABLE 5

Physical quantity	Name of unit	Symbol for unit	Definition of unit
length	inch	in	$2.54 \times 10^{-2} \text{ m}$
mass	pound (avoirdupois)	lb	$0.453\,592\,37 \text{ kg}$
time*	minute	min	60 s
time*	hour	h	3600 s
force	kilogramme-force	kgf	$9.806\,65 \text{ N}$
force	pound-force	lbf	$9.806\,65 \times 0.453\,592\,37 \text{ N}$
pressure	atmosphere	atm	$101\,325 \text{ N m}^{-2}$
pressure	conventional millimetre of mercury	mmHg	$13.5951 \times 9.806\,65 \text{ N m}^{-2}$
pressure	torr	Torr	$(101\,325/760) \text{ N m}^{-2}$
pressure	pound-force per square inch	lbf in ⁻²	$9.806\,65 \times 4535.9237 \text{ N m}^{-2}$
energy	kilowatt hour	kW h	$3.6 \times 10^6 \text{ J}$
energy	thermochemical calorie	cal(thermochem.)	4.184 J
energy	I.T. calorie	cal _{IT}	4.1868 J
thermodynamic temperature	degree Rankine	$^{\circ}\text{R}$	$(5/9) \text{ K}$
radioactivity	curie	Ci	$3.7 \times 10^{10} \text{ s}^{-1}$

* Use of other common units (min, h, day) may continue in normal expressions of intervals of time.

(11) *Symbol.* The symbol for a unit will be printed in roman (upright) type, remains unaltered in the plural and does not take a full point, *i.e.* 5 cm not 5 cm. or 5 cms or 5 cms.

The symbol will be separated from the numerical value by a thin space.

(12) *Decimal fractions and multiples of SI units having special names.* These names are not part of the SI, but for the time being their use in The Society's publications may continue. The list given in Table 4 is not exhaustive.

TABLE 4

Physical quantity	Name of unit	Symbol	Definition of unit
length	ångström	Å	$10^{-10} \text{ m} = 10^{-1} \text{ nm}$
length	micron	μm	10^{-6} m
area	barn	b	10^{-28} m^2
volume	litre	l	$10^{-3} \text{ m}^3 = \text{dm}^3$
mass	tonne	t	$10^3 \text{ kg} = \text{Mg}$
force	dyne	dyn	10^{-5} N
pressure	bar	bar	10^5 N m^{-2}
pressure	pascal	Pa	N m^{-2}
energy	erg	erg	10^{-7} J
kinematic viscosity	diffusion coefficient	stokes	St
dynamic viscosity	poise	P	$10^{-1} \text{ kg m}^{-1} \text{s}^{-1}$
magnetic flux	maxwell	Mx	10^{-8} Wb
magnetic flux density (magnetic induction)	gauss	G	10^{-4} T
conductance	siemens	S	Ω^{-1}

(13) *Units defined in terms of the best available experimental values of certain physical constants.* These units are not part of the SI. The factors for conversion of these units to SI units are subject to change in the light of new experimental measurements of the constants involved. Their use outside the restricted contexts to which they are appropriate should be discouraged. The following list is not exhaustive.

Physical quantity	Name of unit	Symbol for unit	Conversion factor
energy	electronvolt	eV	$\text{eV} \approx 1.6021 \times 10^{-19} \text{ J}$
mass	unified atomic mass unit	u	$u \approx 1.660\,41 \times 10^{-27} \text{ kg}$

(14) *Other units now exactly defined in terms of the SI units.* These units are not part of the SI. It is recognized that their use may be continued for some time but it is recommended that except in special circumstances they should be progressively abandoned in conformity with international recommendations. The list given in Table 5 is by no means exhaustive. Each of the definitions given in the fourth column is exact.

NOTICE TO AUTHORS—No. 6/1969

Formulae and Figures

The purpose of all illustrative matter in a paper is to clarify the arguments and descriptions rather than to duplicate them. The Society strongly encourages the use of displayed formulae, particularly in the form of schemes where the details of a reaction sequence are often more easily understood when illustrated than when described in the text.

All formulae and figures should be clearly drawn, and in the case of figures provided with captions; the latter should be typed on a separate sheet. Since all formulae carry a key number by which they are identified, unless they form part of the running text or unless they are part of a scheme which itself has a caption, they are not generally further described. Blocks of formulae do not need a caption.

Illustrative matter is divided, for technical reasons, into figures and formulae, although in many cases (e.g. crystal structures which may be regarded as formulae but which are treated as figures) these divisions overlap.

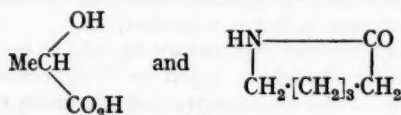
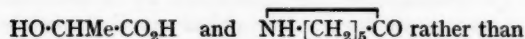
Structural Formulae.—(a) Only those formulae which are displayed may be given key numbers. In all other cases the compounds concerned are referred to by name only.

(b) Formulae are numbered sequentially with bold arabic numerals in parentheses [(1), (2), and (3) *etc.*] as they are displayed and *not* as they are mentioned in the text.

(c) In complex reaction schemes the formulae should be numbered serially following the reaction sequence. Non-sequential numbering in a collection of formulae can render it hard to locate an individual number.

(d) Structural or displayed formulae must be carefully and accurately drawn or typed on a separate sheet, rather than inserted into the text, although a marginal indication of where they are to go in the text is desirable.

(e) Formulae inserted into the body of the text (as distinct from those displayed separately) should be written on one line if possible, e.g.



(f) Points (which may be typed as full stops) are used to indicate bonds between the atoms of the backbone chain of a compound. The symbol of each element of that chain is preceded by a full stop (or colon for a double bond) and followed by the symbols or formulae of the atoms or groups that are attached to it (parentheses being used where necessary to enclose compound groups), e.g. *o*-HO-C₆H₄·CH₂·NH₂ and CH₂Cl·CH(OH)·CO₂H.

Groups that are indicated by a single symbol (e.g. Me and Et *etc.*) do not need use of such full stops.

Repeating sequences of a backbone composite group are enclosed with square brackets and their number is indicated by an inferior multiplier, e.g. HO·[CH₂]₄·NH₂, but HO·[CH₂]₄·N(CH₂·OH)₂.

(g) The use of large circles to represent six delocalized π -electrons in cyclic systems (with or without positive or negative signs as appropriate) is permitted in certain circumstances. Cyclic systems with more or less than six delocalized π -electrons may be represented by formulae containing dotted lines. Both topics are dealt with in *Proceedings*, 1959, 75.

(h) Customary steric conventions must be observed, notably for steroids, triterpenes, and carbohydrates. The Society uses wedges (\blacktriangle) or heavy lines (—) rather than blocked circles (\bullet) and broken lines in the form ----- rather than |||| .

(i) The symbols Me, Et, Prⁿ, Prⁱ, Buⁿ, Buⁱ, Bu^s, Bu^t, Ph, Ac, Bz (the symbol for PhCO and not for PhCH₂), Alk, Ar, and Hal, should be used but may be written in full when the groups are involved in the reaction described. Other special symbols, if used, require an explanatory footnote. The carboxy-group is written CO₂H (*not* COOH) and similarly CO₂R.

(j) One variable univalent substituent is indicated by R; when more than one independently variable general substituent is present, R¹, R², and R³ should be used (*not* R, R¹, R², R³; or R₁, R₂, and R₃ which indicate 1 \times R and multiples of R thereof).

(k) Often it is desirable to use one formula to represent a number of related compounds (or classes of compounds) by the use of one or more independently variable substituents. It is preferable to give each compound thus represented a separate key number rather than to subdivide individual key numbers by alphabetical suffixes [*i.e.* (1a), (1b), (1c) *etc.*].



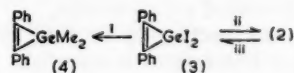
- (1) R¹ = R² = Ph, R³ = Me, X = O
(2) R¹ = Me, R² = R³ = Ph, X = S



- (3) R¹ = Me, R² = Ph, R³ = Bz
(4) R¹R² = CO-O-CO, R³ = Ph

The use of more than four independently variable substituents or atoms on one generalized formula is discouraged.

(l) Once a formula has been displayed it is permissible to employ its key number in later reaction schemes or equations rather than to re-display the formula:



Reagents: i, MeMgI; ii, NaOH; iii, HI

It should be noted that reagents and reaction conditions are given as footnotes to the scheme for economy of space; if present, an equation number is set as far to the right as possible, and if there is likelihood of

confusion with compound key-numbers it is accompanied by the word equation.

(m) Displayed formulae, unless they are capable of being typed on one line [see point (e) above], should not be included in tables; they should be displayed before the table with a key number for each compound and this should be used in the table.

(n) The key number for a compound may be used in the cursive text to avoid repetition of long chemical names; this device must not be used to excess. In general it is preferred if the key number is qualified by a partial name for the compound as in the following example:

Pyolin (1) was oxidized by permanganate to the oxo-acid (2), the methyl ester (3) of which with methylmagnesium iodide gave the normal product (4).

(o) Reference to compounds in the Summary by key number alone is not allowed since a summary should be comprehensible without reference to the body of the paper itself. The reference number should, however, accompany the name of the compound to which it refers.

Figures.—(a) Figures must bear on the back the names of the authors, the title of the paper (abbreviated if necessary), and the number of the figure.

(b) Figures must be in Indian ink, on Bristol board, white smooth cartridge paper, tracing linen, plastic film (it is essential that the special plastic ink developed for this is used), or graph paper with *faint* blue lines (red or brown lines must not be present as these may be reproduced by the photographic process of block making). Since lines must be black and sharp, photostats or similar prints are often not suitable. If paper is used, it must be strong enough to withstand repeated handling.

(c) Lettering and numerals must be in *blue pencil* (not red or black pencil or ink) clearly legible but not so heavily scored as to make a permanent impression on the paper or board.

(d) When the figures are large (more than 8 in \times 10 in), smaller copies (which may be rough, as long as they are clear) should be supplied for submission to the referees; editing will not be undertaken, however, before the final figures are received.

(e) Figures must be carefully drawn, preferably three times the size (linear) that seems necessary to ensure sharp printing, but excessive reduction is costly and illustrations that exceed five times the size of the finished block may be returned to the author for redrawing.

(f) Two-inch margins are essential all round figures. Lettering for insertion at margins should be placed well clear of the ordinate or abscissa line so that it can be copied before erasure.

Lettering and touching-up are done by the Society and clarity of instructions is essential. When there is much lettering, or complicated lettering, and always when tracing linen or plastic film is used, a rough tracing should be added with the lettering shown in ink.

(g) Since, for printing, the size is reduced, lines should not be too thin. Given lines must be of even thickness, angles neat, and curves smooth.

(h) Graphs should have only the requisite minimum of the scale (not less than three points) marked by numerals, and the scale lines should not normally be continued into the body of the figure.

(i) Graphs in any one paper should, when convenient, be drawn to the same scale, and scale markings should, when possible, be identical so that the graphs may be placed adjacent on the page. Contrariwise, two curves drawn to different scales can be shown on one graph by having the appropriate scales on the left-hand and the right-hand side. The use of both right- and left-hand axes and top and bottom axes on figures which have quantitative significance is encouraged.

(j) Experimental points must be shown sufficiently large to be distinguishable when reduced in size. Whenever possible, they should be confined to open and closed circles, crosses, squares, and triangles. Partly black circles and similar signs frequently become indistinguishable in print.

(k) Curves may be distinguished as full lines (—), broken (---) or dotted lines (···), and dot-dash lines (— · — · —); further differentiation should normally be achieved by labelling the curves, which is, in any case, desirable.

(l) For reference in legends, it is preferable to mark curves A, B, C, *etc.* rather than to reproduce the type of line in print.

(m) There must be no unnecessary waste space, *e.g.* around curves; ordinates and abscissae should start at zero only if the curve extends to that range. Enlargement of parts of a figure can occasionally be placed in a corner of the complete figure.

(n) It is not advisable to insert much or complicated lettering on curves or in blank spaces; mistakes (in copying by the artist) can rarely be rectified once the block is made. It is better to label the curves A, B, C, *etc.* and to use explanatory legends.

(o) *Large* solid objects should be represented by hatching rather than by black surfaces, otherwise the ink may smear on printing.

(p) Photographs are reproduced by a half-tone process on art paper. The prints supplied must be very clear and of good contrast, as considerable definition may be lost in reproduction.

(q) Captions and explanatory legends, to be set by the printer should be typed on a separate page attached to the manuscript, and not given on the figure itself.

(r) Figures are numbered consecutively Figure 1, Figure 2, *etc.* (in arabic numerals). Photographs (half-tone reproduction) are numbered consecutively Plate 1, Plate 2, *etc.* but these numbers are independent of the numbering of any figures.

(s) Since figures represent an uneconomical use of space their number and size should be kept to a minimum. Figures and tables for the same values are discouraged.

Deposition of Data—Supplementary Publications Scheme

Preamble

The growing volume of research that produces large quantities of data, the increasing facilities for analysing such data mechanically, and the rising cost of printing are each making it very difficult to publish in the *Journal* in the normal way the full details of the experimental data which become available. Moreover, whilst there is a large audience for the general method and conclusions of a research project, the number of scientists interested in the details, and in particular in the data, of any particular case may be quite small. The National Lending Library (N.L.L.) in consultation with the Editors of scientific journals, has now developed a scheme whereby such data and detail may be stored and then copies made available on request at the N.L.L., Boston Spa. The Chemical Society is a sponsor of this scheme and has indicated to the National Lending Library its wish to use the facilities being made available in this 'Supplementary Publications Scheme'.

Bulk information (such as crystallographic structure factor tables, computer programmes and output, evidence for amino-acid sequences, spectra, etc.), which accompany papers published in future issues of the Chemical Society's *Journal* may in future be deposited, free of charge, with the Supplementary Publications Scheme, either at the request of the author and with the approval of the referees or on the recommendation of referees and the approval of the author.

The Scheme

Under this scheme, authors will submit articles and the supplementary material to the *Journal* simultaneously in the normal way, and both will be refereed. If the paper is accepted for publication the supplementary material will be sent by the Society to the National Lending Library where it will be stored on microfiche. Microfiche and enlarged copies will be obtainable by individuals both in the U.K. and abroad on quoting a supplementary publication number that will appear in the parent article. Difficult or oversized material may only be available as 35 mm microfilm or enlarged copies.

The Microfiche

A single microfiche will accommodate 58 pages in microform, plus an eye-visible title; additional pages are accommodated on numbered 'trailer' fiches, each holding 69 pages. The eye-visible title on the first microfiche will comprise the supplementary publication number (see below), the authors' names, and the bibliographic reference to the parent article which the microfiche supplements.

Authors will be responsible for the preparation of camera-ready copy according to the following specifications (although the Society will be prepared to help in case of difficulty).

- Optimum page size for text or tables in type-script: up to 30 cm × 21 cm.
- Limiting page size for text or tables in type-script: 33 cm × 24 cm.
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- Tabular matter should be headed descriptively on the first page, with column headings recurring on each page.
- Pages should be clearly numbered to ensure the correct sequence of frames on the microfiche.

It is recommended that all material which is to be deposited should be accompanied by some prefatory text. Normally this will be the summary from the parent paper and authors will greatly aid the deposition of the material if a duplicate copy of the summary is provided. If authors have the facilities available the use of a type face designed to be read by computers is encouraged.

Deposition

The Society will be responsible for the deposition of the material with the National Lending Library. The N.L.L. will not receive material direct from authors since the Library wishes to ensure that the material has been properly and adequately refereed.

Action by the Society

The Society will receive a manuscript for publication together with any supplementary material for deposition and will circulate all of this to referees in the normal way. When the edited manuscript is sent to the printers the supplementary material will be sent for deposition to the National Lending Library who will issue the necessary publication number. The Society will add to the paper, at the galley proof stage, a footnote indicating what material has been deposited in the Supplementary Publications Scheme, the number of microfiches it occupies, the supplementary publication number, and details as to how copies may be obtained.

Availability

This supplementary material will be available either as microfiche or as a photographic enlargement, from the National Lending Library's photocopying service. This works on a prepaid, flat rate, coupon basis.

The present coupon buys one item on microfiche or 1–10 pages of photocopy from a single item.

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The cost includes postage; outside the U.K. all items are sent by airmail.

It is realised that not all users will want to purchase 20 coupons at a time. The Society is therefore prepared to act as agent and hold coupons which may then be purchased from the Society at the prices quoted above.

In all correspondence with the National Lending Library or the Society authors must cite the supplementary publications number.

International Collaboration

A similar scheme (known as the National Auxiliary Publications Service) is being operated in the U.S.A. by the American Society for Information Science. Similar schemes are also being contemplated in other countries. The provision of reciprocal arrangements for the exchange of supplementary data between the various national deposition centres is being investigated.

NOTICES TO AUTHORS—No. 8/1970

X-Ray Crystallographic Structure Factor Tables

The Society has recently taken advice from the members of its Chemical Crystallography Group and as a result of this and of the inception of the National Lending Library Supplementary Publications Scheme (discussed in Notices to Authors No. 7) the following rules are being taken into use forthwith to govern the publication or deposition of X-ray crystallographic structure factor tables.

(i) The Society will no longer publish tables of structure factors in its publications except in accordance with the provision of paragraph (iv) below.

(ii) All authors of crystallography papers will submit along with the manuscript a readable table of such structure factors for the referees' inspection. The table should be prepared in accordance with the detail given in paragraph 3 of Notices to Authors No. 7 so that it may be used for deposition. Computer printout may be used providing that it is top copy in good contrast (see note).

(iii) If the referees accept the paper and its associated structure factor tables then the Society will deposit these structure factor tables in the National Lending Library Supplementary Publications Scheme

(see Notices to Authors No. 7) and will publish as a footnote to the paper the necessary details that will enable any reader to obtain a copy in microfiche or an electrophotographic printoff of the data tables associated with the paper.

(iv) Authors, or the referees, may request publication of such tables of structure factors, *in extenso*, in cases that seem to them to be desirable. It is expected that this will occur only rarely.

(v) The details of the National Lending Library Supplementary Publications Scheme and the methods for obtaining microfiche or photographic printoff of material deposited with that scheme are given in Notices to Authors No. 7.

Note to paragraph (ii). Structure factor tables prepared from computer printout must be presented in the form indicated in paragraph 3 of Notices to Authors No. 7 and must be arranged with the greatest economy of space possible [*i.e.* not less than two groups of columns (h , k , l , F_o , F_c) to the page (30 cm \times 21 cm)]. All columns must be headed. A 'paste-up' on white card of computer printout will be acceptable providing the quality of the printout is adequate.

NOTICE TO AUTHORS—No. 9/1974

Nomenclature

For many years the Society has actively encouraged the use of standard I.U.P.A.C. nomenclature and symbolism in its publications as an aid to the accurate and unambiguous communication of chemical information between authors and readers. Although the I.U.P.A.C. rules for naming organic compounds have now gained wide acceptance amongst chemists, mainly because they have been in existence for a number of years, those for naming inorganic compounds are of more recent origin and for this reason their acceptance is less general.

In order to encourage authors to use I.U.P.A.C. nomenclature rules when drafting papers, attention is drawn to the following publications in which both the rules themselves and guidance on their use are given.

'Nomenclature of Organic Chemistry, Sections A, B, and C,' Butterworths, London, 2nd Edition, 1971.

'Nomenclature of Inorganic Chemistry,' Butterworths, London, 1971.

'Manual of Symbols and Terminology for Physicochemical Quantities and Units,' Butterworths, London, 1970.

In addition to the above publications, provisional rules for the naming of organometallic compounds, amino-acids, carbohydrates, carotenoids, and steroids, and rules of stereochemistry are available from the:

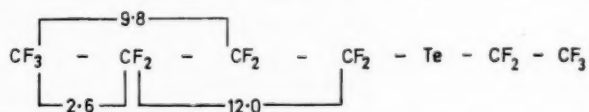
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Bank Court Chambers,
2—3 Pound Way,
Cowley Centre,
OXFORD OX4 3YF.

It is recommended that where there are no I.U.P.A.C. rules for the naming of particular compounds or authors find difficulty in applying the existing rules, they should seek the advice of the Society's editorial staff.

ERRATA

Dalton Transactions

1975, p. 489, r.h. column, Table. 3rd entry diagram showing the coupling constants for $C_4F_9TeC_2F_5$ should be replaced by



p. 2128, ref. 21. *For Indian Med. Surg. read Industrial Med. Surg.*

ERRATA

James Thompson

1891

1891

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CS Publications News

Safety in the chemical laboratory

The 1974 legislation on Health and Safety at Work has created a renewed concern for wider knowledge of safety precautions and procedures in potentially

dangerous work environments such as laboratories. Particularly appropriate to this problem is the Society's publication, *Hazards in the Chemical Laboratory*. Although the present edition was published in 1971, well before the 1974 Act, it does contain much valuable information on the potentially dangerous properties, toxic effects, first aid treatment and spillage disposal, of over 430 corrosive materials or groups of materials commonly used in laboratories. It is unlikely that this information will be greatly altered as a result of any code of practice published under the 1974 Act. The listings mentioned above occupy over 190 pages of the book's 266 pages, the remaining pages being devoted to chapters on: planning for safety; fire protection; first aid; safety in hospital biochemistry laboratories; precautions against radiations.

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